

=&gt; d his

```

(FILE 'HOME' ENTERED AT 11:20:53 ON 11 SEP 2009)

FILE 'REGISTRY' ENTERED AT 11:21:02 ON 11 SEP 2009
L1      1 S OLANZAPINE/CN

FILE 'REGISTRY' ENTERED AT 11:22:33 ON 11 SEP 2009

FILE 'STNGUIDE' ENTERED AT 11:23:29 ON 11 SEP 2009

FILE 'REGISTRY' ENTERED AT 11:24:15 ON 11 SEP 2009
L2      1 S L1 FAM SAM
L3      97 S 132539-06-1/CRN
L4      98 S L1 OR L3
L5      1 S 132539-06-1/RN

FILE 'REGISTRY' ENTERED AT 11:29:07 ON 11 SEP 2009
L6      STR 132539-06-1
L7      110 S L6 FAM FUL
        DEL SEL Y
        SEL CHEM L7
L8      QUE E2-E129

FILE 'HCAPLUS' ENTERED AT 11:34:55 ON 11 SEP 2009

FILE 'STNGUIDE' ENTERED AT 11:35:07 ON 11 SEP 2009

FILE 'HCAPLUS' ENTERED AT 11:36:58 ON 11 SEP 2009
L9      3346 S L8
L10     139365 S (CRYST?) AND (POLYMORPH? OR POLYTYP? OR POLYSTRUCTUR? OR DIMO
L11     83 S L9 AND L10

FILE 'STNGUIDE' ENTERED AT 11:38:50 ON 11 SEP 2009

FILE 'HCAPLUS' ENTERED AT 11:51:33 ON 11 SEP 2009

FILE 'REGISTRY' ENTERED AT 11:52:02 ON 11 SEP 2009

FILE 'HCAPLUS' ENTERED AT 11:52:11 ON 11 SEP 2009
L12     1 S US20080280884/PN
L13     1 S US20080188465/PN
L14     1 S US20070191348/PN
        SELECT RN L12 1-
        SELECT RN L13 1-
        SELECT RN L14 1-

FILE 'REGISTRY' ENTERED AT 11:53:00 ON 11 SEP 2009
L15     28 S E130-167
L16     25 S L15 NOT L7

FILE 'STNGUIDE' ENTERED AT 11:54:39 ON 11 SEP 2009

FILE 'REGISTRY' ENTERED AT 11:57:05 ON 11 SEP 2009
L17     3 S L15 NOT L16
L18     1 S L17 AND PROPANOL
L19     1 S L17 AND TETRAHYDROFURAN

```

10/591,831

L20            1 S L17 NOT (L18 OR L19)

FILE 'HCAPLUS' ENTERED AT 12:03:02 ON 11 SEP 2009

L21            1 S L18

L22            2 S L19

L23           532528 S CRYSTAL STRUCTURE/IT

L24           14645 S CRYSTAL MORPHOLOGY/IT

L25           544125 S L23 OR L24

L26           52 S L9 AND L25

L27           96 S L11 OR L26

=> d ibib abs hitstr total

L27 ANSWER 1 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2009:743098 HCAPLUS  
 DOCUMENT NUMBER: 151:64057  
 TITLE: Injectable nanoparticulate olanzapine formulations  
 INVENTOR(S): Ruddy, Stephen B.; Czekai, David; Liversidge, Gary; Jenkins, Scott A.; Liversidge, Elaine M.  
 PATENT ASSIGNEE(S): Elan Pharma International Limited, Ire.  
 SOURCE: U.S. Pat. Appl. Publ., 20pp., Cont.-in-part of U.S. Ser. No. 274,887.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

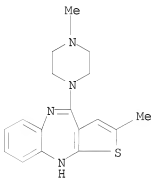
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20090155331	A1	20090618	US 2008-333233	20081211
US 20060154918	A1	20060713	US 2005-274887	20051116
PRIORITY APPLN. INFO.:			US 2005-274887	A2 20051116
			US 2004-628748P	P 20041116

AB Described are injectable formulations of particulate olanzapine that produce a prolonged duration of action upon administration, and methods of making and using such formulations. The injectable formulations comprise particulate olanzapine.

IT 132539-06-1, Olanzapine  
 RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (injectable nanoparticulate olanzapine formulations)

RN 132539-06-1 HCAPLUS

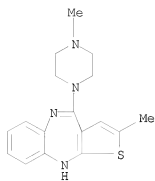
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)



L27 ANSWER 2 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2008:1526982 HCAPLUS  
 DOCUMENT NUMBER: 150:41197  
 TITLE: Novel processes to form-I of olanzapine  
 INVENTOR(S): Guntoori, Bhaskar Reddy; Kothakonda, Kiran Kumar; Che,  
 Daqing; McPhail, Cameron L.  
 PATENT ASSIGNEE(S): Apotex Pharmachem Inc., Can.  
 SOURCE: Can. Pat. Appl., 16pp.  
 CODEN: CPXXEB  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2591644	A1	20081214	CA 2007-2591644	20070614
US 20080312433	A1	20081218	US 2007-976944	20071030
WO 2008151430	A1	20081218	WO 2008-CA1124	20080612
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRIORITY APPLN. INFO.:			CA 2007-2591644	A 20070614
			US 2007-976944	A 20071030
AB	A process for obtaining crystalline Form-I olanzapine comprising the following: (a) dissolving crude olanzapine in a solvent to form a solution, (b) optionally drying by azeotropic distillation to remove water, (c) precipitating by adding the solution of step (a) to an antisolvent, and (d) isolating the precipitated crystalline Form-I olanzapine by filtration and drying at ambient temperature			
IT	132539-06-1, Zyprexa RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (novel processes to form-I of olanzapine)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)			

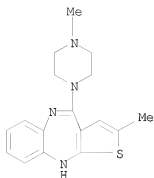
10/591,831



L27 ANSWER 3 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2008:1512324 HCAPLUS  
 DOCUMENT NUMBER: 150:63780  
 TITLE: Novel processes to form-I of olanzapine  
 INVENTOR(S): Che, Daqing; Kothakonda, Kiran Kumar; McPhail,  
 Cameron; Guntoori, Bhaskar Reddy  
 PATENT ASSIGNEE(S): Apotex Pharmachem Inc., Can.  
 SOURCE: PCT Int. Appl., 13pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008151430	A1	20081218	WO 2008-CA1124	20080612
W:	AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
CA 2591644	A1	20081214	CA 2007-2591644	20070614
US 20080312433	A1	20081218	US 2007-976944	20071030
PRIORITY APPLN. INFO.:			CA 2007-2591644	A 20070614
			US 2007-976944	A 20071030
AB	A process for obtaining crystalline Form-I olanzapine comprising the following: (a) dissolving crude olanzapine in a solvent to form a solution, (b) optionally drying by azeotropic distillation to remove water, (c) precipitating by adding the solution of step (a) to an antisolvent, and (d) isolating the precipitated crystalline Form-I olanzapine by filtration and drying at ambient temperature			
IT	132539-06-1 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (novel processes to form-I of olanzapine)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)			

10/591,831



REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 4 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1454448 HCAPLUS

DOCUMENT NUMBER: 150:20247

TITLE: Novel carborane and metallacarborane analogs of common medicaments and biologically active compounds as agents for BNCT, MRI, and other physical diagnostic methods

INVENTOR(S): Hey-Hawkins, Evamarie; Scholz, Matthias

PATENT ASSIGNEE(S): Universitaet Leipzig, Germany

SOURCE: PCT Int. Appl., 168pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008145733	A2	20081204	WO 2008-EP56702	20080530
WO 2008145733	A3	20090507		
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
DE 102007026701	A1	20081204	DE 2007-102007026701	20070601

PRIORITY APPLN. INFO.:

DE 2007-102007026701A 20070601

OTHER SOURCE(S):

MARPAT 150:20247

AB New substituted carboranes, preferably 1,2-C2B10H12R1R2, 1,7-C2B10H12R1R2 and 1,12-C2B10H12R1R2 (I), metallocarboranes 3,1,2-(LnM)C2B10H9R1R2, mimeting common drugs by partially or complete replacement of (un)substituted 1,2-C6H4, 1,3-C6H4 or 1,4-C6H4 moieties, are claimed as agents for BNCT, BNCS, MRI, PET, SPECT, PIGE, AFM-NIAR and related therapeutic and diagnostic methods. The process for preparation the compds. I comprise synthesis of common carborane functional derivs., partial fragmentation of the drug mols. and re-synthesis of drug carborane analogs. In an example, Indomethacin [1; 1-(4-chlorobenzoyl)-5-methoxy-2-methyl-3-indoleacetic acid] was hydrolyzed and esterified to give Me 5-methoxy-2-methyl-3-indoleacetate (2), acylation of 2 by 1,2- or 1,7-C2B10H11-1-COCl gave the corresponding carboranyl indomethacin analogs, 1-(o-carboran-1-ylcarbonyl)-5-methoxy-2-methyl-3-indoleacetic acid (3), and 1-(m-carboran-1-ylcarbonyl)-5-methoxy-2-methyl-3-indoleacetic acid (4). The invention further relates to a method for the production and use thereof in pharmaceuticals, as catalysts, and as materials.

IT 132539-06-1, Olanzapine

RL: PAC (Pharmacological activity); RCT (Reactant); THU (Therapeutic use);

BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

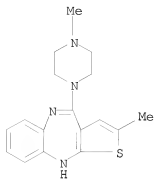
(process for preparation of carboranyl analogs of common drugs for BNCT, MRI, autoradiog. diagnostic, therapeutic and catalytic uses)



10/591,831

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)



L27 ANSWER 5 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1451054 HCAPLUS

DOCUMENT NUMBER: 150:20246

TITLE: Novel carborane and metallacarborane analogs of common medicaments and biologically active compounds as agents for BNCT, MRI, and other physical diagnostic methods

INVENTOR(S): Hey-Hawkins, Evamarie; Scholz, Matthias

PATENT ASSIGNEE(S): Universitaet Leipzig, Germany

SOURCE: Ger. Offen., 115pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102007026701	A1	20081204	DE 2007-102007026701	20070601
WO 2008145733	A2	20081204	WO 2008-EP56702	20080530
WO 2008145733	A3	20090507		

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: DE 2007-102007026701A 20070601

AB New substituted carboranes, preferably 1,2-C2B10H12R1R2, 1,7-C2B10H12R1R2 and 1,12-C2B10H12R1R2 (I), metallocarboranes 3,1,2-(LnM)C2B10H9R1R2, mimeting common drugs by partially or complete replacement of (un)substituted 1,2-C6H4, 1,3-C6H4 or 1,4-C6H4 moieties, are claimed as agents for BNCT, BNCS, MRI, PET, SPECT, PIGE, AFM-NIAR and related therapeutic and diagnostic methods. The process for preparation the compds. I comprise synthesis of common carborane functional derivs., partial fragmentation of the drug mols. and re-synthesis of drug carborane analogs. In an example, Indomethacin [1; 1-(4-chlorobenzoyl)-5-methoxy-2-methyl-3-indoleacetic acid] was hydrolyzed and esterified to give Me 5-methoxy-2-methyl-3-indoleacetate (2), acylation of 2 by 1,2- or 1,7-C2B10H11-1-COCl gave the corresponding carboranyl indomethacin analogs, 1-(o-carboran-1-ylcarbonyl)-5-methoxy-2-methyl-3-indoleacetic acid (3), and 1-(m-carboran-1-ylcarbonyl)-5-methoxy-2-methyl-3-indoleacetic acid (4). The invention further relates to a method for the production and use thereof in pharmaceuticals, as catalysts, and as materials.

IT 132539-06-1

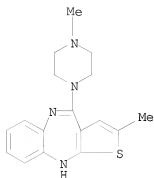
RL: PAC (Pharmacological activity); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(process for preparation of carboranyl analogs of common drugs for BNCT, MRI, autoradiog. diagnostic, therapeutic and catalytic uses)

RN 132539-06-1 HCAPLUS

10/591,831

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)



REFERENCE COUNT:

17

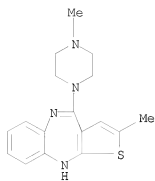
THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 6 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2008:1399007 HCAPLUS  
 DOCUMENT NUMBER: 149:582508  
 TITLE: Filtration and crystallization process for  
 the preparation of pharmaceutically pure  
 olanzapine  
 INVENTOR(S): Gaitonde, Abhay; Manojkumar, Bindu; Bhalerao, Rahul;  
 Shinde, Dattatraya  
 PATENT ASSIGNEE(S): Generics UK Limited, UK; Merck Development Centre  
 Private Limited  
 SOURCE: PCT Int. Appl., 18pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008139228	A2	20081120	WO 2008-GB50350	20080514
WO 2008139228	A3	20090226		
W:	AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			

PRIORITY APPLN. INFO.: IN 2007-MU918 A 20070515  
 AB The present invention relates to a novel process for the preparation of pharmaceutically pure olanzapine. The invention is also related to impurities obtained during the preparation of pharmaceutically pure olanzapine and methods for the detection of the impurities. Thus 100 g polymorphic form I from crude olanzapine is dissolved in 500 mL dichloromethane at reflux temperature and passed through a charcoal bed under reduced pressure. The filtrate was cooled; the obtained olanzapine didn't contain HPLC detectable amount of the claimed dimer impurity.  
 IT 132539-06-1P, Olanzapine  
 RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (filtration and crystallization for preparation of pharmaceutically pure olanzapine)  
 RN 132539-06-1 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

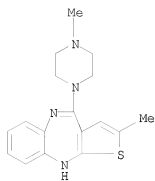
10/591,831



L27 ANSWER 7 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2008:917057 HCAPLUS  
 DOCUMENT NUMBER: 149:183519  
 TITLE: Process for preparation of substantially pure  
 polymorphic form of olanzapine  
 INVENTOR(S): Kozluk, Tomasz  
 PATENT ASSIGNEE(S): Tomasz Kozluk Nobilus ENT, Pol.  
 SOURCE: PCT Int. Appl., 21pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008091169	A2	20080731	WO 2008-PL7	20080122
WO 2008091169	A3	20090205		
W:	AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			
PRIORITY APPLN. INFO.:		PL 2007-381564	A	20070122
AB	This invention relates to process for preparation of substantially pure polymorphic form of olanzapine consists in that olanzapine starting material is subjected to: (a) at least one digestion step in an acidic aqueous medium, with an optional addition of active charcoal, and then to neutralizing to pH within the range from about 6.0 to about 11.0, and (b) at least one step of separation of impurities in a water - organic solvent system, followed by crystallization from the solution in methylene chloride, and wherein steps (a) and (b) are separated by steps of isolation of precipitate of olanzapine and can be accomplished in any order.			
IT	132539-06-1, Olanzapine RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (process for preparation of substantially pure polymorphic form of olanzapine)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)			

10/591,831



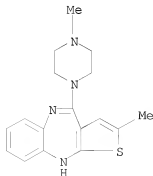
L27 ANSWER 8 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2008:294275 HCAPLUS  
 DOCUMENT NUMBER: 148:456455  
 TITLE: Process for the preparation of crystalline form-II of olanzapine  
 INVENTOR(S): Reddy, Reguri Buchi; Ramesh, Chakka; Reddy, Tamma Ranga  
 PATENT ASSIGNEE(S): Dr. Reddys Laboratories Limited, India  
 SOURCE: Indian Pat. Appl., 14pp.  
 CODEN: INXXBQ  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 2003MA00105	A	20070727	IN 2003-MA105	20030206
PRIORITY APPLN. INFO.:			IN 2003-MA105	20030206

AB The present invention is directed to provide a novel process for the preparation of form-II of olanzapine. The present invention also embodies the novel process for the preparation of crystalline form-II of olanzapine, which comprises dissolving the olanzapine monohydrate or olanzapine dihydrate or olanzapine form-I in an organic solvent or solvents following by subsequent cooling and isolation to get the desired polymorph form-II of olanzapine. The process of the present invention is simple, ecofriendly and well suited for industrial scale up. Olanzapine dihydrate was suspended in acetonitrile and heated until reflux, and the solution was treated with carbon and filtered. The filtrate was concentrated to give crystalline form-II of olanzapine.

IT 132539-06-1P, Olanzapine  
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 {process for preparation of crystalline form-II of olanzapine}

RN 132539-06-1 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



IT 205485-16-1, Olanzapine dihydrate



10/591,831

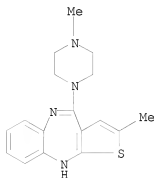
402586-77-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(process for preparation of crystalline form-II of olanzapine)

RN 205485-16-1 HCAPLUS

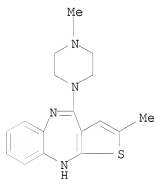
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:2) (CA INDEX NAME)



● 2 H<sub>2</sub>O

RN 402586-77-0 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:1) (CA INDEX NAME)



● H<sub>2</sub>O

L27 ANSWER 9 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:192723 HCAPLUS

DOCUMENT NUMBER: 148:433535

TITLE: Isolation, identification, and synthesis of two oxidative degradation products of olanzapine (LY170053) in solid oral formulations

AUTHOR(S): Baertschi, Steven W.; Brunner, Heiko; Bunnell, Charles A.; Cooke, Gary G.; Diserod, Benjamin; Dorman, Douglas E.; Jansen, Patrick J.; Kemp, Craig A. J.; Maple, Steven R.; McCune, Karen A.; Speakman, Jeffrey L.

CORPORATE SOURCE: Analytical Sciences Research and Development, Lilly Corporate Center, Eli Lilly and Company, Indianapolis, IN, 46285, USA

SOURCE: Journal of Pharmaceutical Sciences (2007), Volume Date 2008, 97(2), 883-892

CODEN: JPMSAE; ISSN: 0022-3549

PUBLISHER: Wiley-Liss, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 148:433535

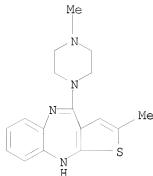
AB Two impurities found in both stressed and aged solid-state formulations of olanzapine have been identified as (Z)-1,3-dihydro-4-(4-methyl-1-piperazinyl)-2-(2-oxo-propylidene)-2H-1,5-benzodiazepin-2-one (1) and (Z)-1-[1,2-dihydro-4-(4-methyl-1-piperazinyl)-2-thioxo-3H-1,5-benzodiazepin-3-ylidene]propan-2-one (2). The structures indicate that the two impurities are degradation products resulting from oxidation of the thiophene ring of olanzapine. The impurities were isolated by preparative HPLC from a thermally stressed formulation, and characterized by UV, IR, MS, and NMR. A synthetic preparation of compds. 1 and 2 by reaction of olanzapine with the singlet oxygen mimic 4-phenyl-1,2,4-triazoline-3,5-dione (PTAD) is presented. The structure of 2 was also determined by single-crystal x-ray diffraction anal. A degradation pathway for the formation of 1 and 2 is proposed.

IT 132539-06-1DP, Olanzapine, adduct formation with 4-phenyl-1,2,4-triazoline-3,5-dione  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

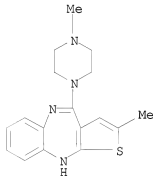
(isolation, identification, and synthesis of two oxidative degradation products of olanzapine (LY170053) in solid oral formulations)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



IT 132539-06-1, Olanzapine  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (isolation, identification, and synthesis of two oxidative degradation  
 products of olanzapine (LY170053) in solid oral formulations)  
 RN 132539-06-1 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

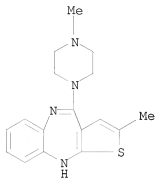
L27 ANSWER 10 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2008:10586 HCAPLUS  
 DOCUMENT NUMBER: 148:106026  
 TITLE: Preparation of crystalline hydrohalide of an organic amine  
 INVENTOR(S): Wieser, Josef; Lengauer, Hannes; Klingler, Elfriede; Pichler, Arthur; Sturm, Hubert  
 PATENT ASSIGNEE(S): Sandoz A.-G., Switz.  
 SOURCE: PCT Int. Appl., 77 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008000418	A2	20080103	WO 2007-EP5596	20070625
WO 2008000418	A3	20080228		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
AU 2007264030	A1	20080103	AU 2007-264030	20070625
CA 2655061	A1	20080103	CA 2007-2655061	20070625
EP 2032521	A2	20090311	EP 2007-785845	20070625
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS				
CN 101484411	A	20090715	CN 2007-80023535	20081223
IN 2008CN07174	A	20090327	IN 2008-CN7174	20081226
PRIORITY APPLN. INFO.:			EP 2006-116134	A 20060627
			WO 2007-EP5596	W 20070625
AB The present invention provides a new method for preparation and crystn . of hydrochlorides, hydrobromides or hydroiodides of pharmaceutical compds. or their intermediates in which the base or its acid addition salt is reacted in a solvent with a Trialkylsilylhalogenide. For example, mycophenolate mofetil base 2 g were dissolved in Et acetate 50 mL at room temperature To this solution acetic acid 0.3 mL and trimethylchlorosilane 0.7 mL were added under stirring. After 2 min at room temperature the crystn . started. The suspension was stirred for 1 h and the precipitate filtered off. The solid was washed with Et acetate and dried under vacuum at room temperature to yield 2.11 g (97.6 %) of mycophenolate mofetil hydrochloride.				
IT 783334-35-0P, Olanzapine dihydrochloride RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of crystalline hydrohalide of an organic amine)				

10/591,831

RN 783334-35-0 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrochloride (1:2) (CA INDEX NAME)

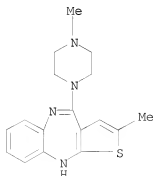


● 2 HCl

L27 ANSWER 11 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:1454159 HCAPLUS  
 DOCUMENT NUMBER: 148:61893  
 TITLE: Stabilization of olanzapine  
 polymorphic form I  
 INVENTOR(S): Kashid, Namdev; Mukherji, Gour  
 PATENT ASSIGNEE(S): Jubilant Organosys Limited, India  
 SOURCE: PCT Int. Appl., 14pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007144901	A1	20071221	WO 2007-IN233	20070612
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

PRIORITY APPLN. INFO.: IN 2006-DE1400 A 20060612  
 AB Disclosed is a process for stabilization of polymorphic Form I of olanzapine. Said process comprises of micronizing said olanzapine in a fluid energy mill employing nitrogen or carbon dioxide.  
 IT 132539-06-1, Olanzapine  
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
 (stabilization of olanzapine polymorphic form I)  
 RN 132539-06-1 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



10/591,831

REFERENCE COUNT:

7

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 12 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:1375717 HCAPLUS

DOCUMENT NUMBER: 148:246110

TITLE: Polymorphism in drugs investigated by low wavenumber Raman scattering

AUTHOR(S): Ayala, Alejandro Pedro

CORPORATE SOURCE: Departamento de Física, Universidade Federal do Ceara, Fortaleza, CE, 60.455-900, Brazil

SOURCE: Vibrational Spectroscopy (2007), 45(2), 112-116

CODEN: VISPEK; ISSN: 0924-2031

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

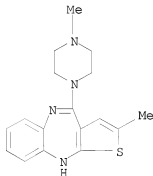
AB Raman scattering is a powerful method to investigate the polymorphism in drugs due to its remarkable sensitivity to the crystalline structure of mol. compds. The sensitivity of the technique is strongly enhanced when considering the low wavenumber Raman active vibrational modes, since mol. skeleton deformations, librations and translations usually lay below 200 cm<sup>-1</sup> and are directly related to the polymorphism phenomenon. In this work, the potential of the low energy Raman spectrum in the investigation of polymorphism of drugs is discussed. Several examples are presented showing the use of this spectral range in the understanding of the mechanism involved in the polymorphic behavior of active pharmaceutical ingredients. The results show that low wavenumber Raman spectra can be used for rapidly and accurately identifying the polymorphic forms of an active ingredient. Addnl. valuable information is obtained when combining spectroscopic measurements with ab initio calcs., x-ray diffraction measurements and thermal anal.

IT 132539-06-1, Olanzapine

RL: ANT (Analyte); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (polymorphism in drugs investigated by low wavenumber Raman scattering)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



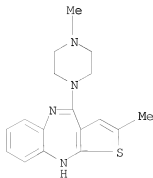
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



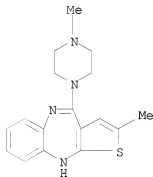
L27 ANSWER 13 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:1363789 HCAPLUS  
 DOCUMENT NUMBER: 147:548134  
 TITLE: Olanzapine pharmaceutical composition  
 INVENTOR(S): Osinga, Niels Jaap; Dorkoosh, Farid Abedin  
 PATENT ASSIGNEE(S): Synthon B.V., Neth.  
 SOURCE: PCT Int. Appl., 16pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007134845	A2	20071129	WO 2007-EP4558	20070518
WO 2007134845	A3	20080417		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
US 20070293479	A1	20071220	US 2007-750730	20070518
PRIORITY APPLN. INFO.:			US 2006-747624P	P 20060518
AB An olanzapine pharmaceutical composition is formed using anhydrous calcium hydrogen phosphate. The composition can be tableted by dry processes and typically has good stability. Thus, a tablet contained olanzapine 2.5, DiCafos-A 71.5, Explotab 5.0, MCC PH102 20, and Mg stearate 1.0%.				
IT 132539-06-1, Olanzapine RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (olanzapine pharmaceutical composition)				
RN 132539-06-1 HCAPLUS				
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)				



L27 ANSWER 14 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:1312460 HCAPLUS  
 DOCUMENT NUMBER: 148:523325  
 TITLE: Process for the preparation of Form I of  
 Olanzapine  
 AUTHOR(S): Anon.  
 CORPORATE SOURCE: USA  
 SOURCE: IP.com Journal (2007), 7(10B), 6 (No.  
 IPCOM000158856D), 2 Oct 2007  
 CODEN: IJPOBX; ISSN: 1533-0001  
 PUBLISHER: IP.com, Inc.  
 DOCUMENT TYPE: Journal; Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IP 158856D		20071002	IP 2007-158856D	20071002
PRIORITY APPLN. INFO.:			IP 2007-158856D	20071002
AB	Processes for obtaining substantially pure Olanzapine Form I by spray drying technique and the preparation of substantially pure Olanzapine Form I by crystallization are disclosed.			
IT	132539-06-1, Olanzapine			
RL:	PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (preparation of form I of olanzapine by spray drying and crystallization)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)			



L27 ANSWER 15 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:1096869 HCAPLUS  
 DOCUMENT NUMBER: 147:350746  
 TITLE: Use of olanzapine for the preparation of  
 pharmaceutical compositions treating insomnia  
 INVENTOR(S): Tran, Pierre V.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: Hung. Pat. Appl., 22pp.  
 CODEN: HUXXCV  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Hungarian  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
HU 9902882	A2	20000228	HU 1999-2882	19970307
HU 9902882	A3	20000428		

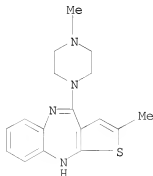
PRIORITY APPLN. INFO.: HU 1999-2882 19970307

AB The subject of the invention is the olanzapine, or the application of the pharmaceutically suitable salt of this compound for the preparation of pharmaceutical compns. for the treatment of insomnia. According to the invention, preferably, the olanzapine polymorph of form is used. X-ray powder diffraction data are presented. Thus 270 g tech. grade olanzapine was dissolved in 2.7 L ethylacetate; heated, cooled and the product was filtered in vacuum. The obtained olanzapine was formulated to tablets that contained (weight/weight%): hydroxypropyl cellulose 4.0; olanzapine 1.18; lactose 79.32; povidone 5; cellulose 10; magnesium stearate 0.5. Tablets were coated with a mixture of hydroxypropyl cellulose, polyethylene and titania; coated tablets were treated with carnauba wax for printing the identification code.

IT 132539-06-1, Olanzapine 132539-06-1D,  
 Olanzapine, salts  
 RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (use of olanzapine for preparation of pharmaceutical compns. treating insomnia)

RN 132539-06-1 HCAPLUS

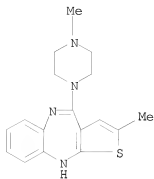
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)



10/591,831

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)



L27 ANSWER 16 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:1064452 HCAPLUS  
 DOCUMENT NUMBER: 147:371627  
 TITLE: Process for producing pure and stable form of  
 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b]  
 [1,5]benzodiazepine  
 INVENTOR(S): Panchasara, Dinesh; Gupta, Poorvi; Kaushik, Geetesh;  
 Dubey, Sushil Kumar  
 PATENT ASSIGNEE(S): Jubilant Organosys Ltd., India  
 SOURCE: PCT Int. Appl., 26pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007105225	A1	20070920	WO 2006-IN91	20060314
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
WO 2006006180	A1	20060119	WO 2004-IN207	20040714
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 1994013	A1	20081126	EP 2006-728410	20060314
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
JP 2009530267	T	20090827	JP 2009-500003	20060314
KR 2009008205	A	20090121	KR 2008-724239	20081002
PRIORITY APPLN. INFO.:			WO 2004-IN207	A2 20040714
			WO 2006-IN91	W 20060314
AB	This invention relates to an improved process for producing pure and thermally color stable crystalline form I of 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5] benzodiazepine and product thereof. The process comprises of reacting 2-(2-aminoanilino)-5-methylthiophene-3-carbonitrile with N-Me piperazine in conjunction with N-methylpiperazine acid salt, to produce 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]			

benzodiazepine. Also disclosed is a process for obtaining the polymorphic form I of 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5] benzodiazepine by crystallizing the crude 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno [2,3-b][1,5] benzodiazepine in a mixture of solvents. Further the invention also provides a new polymorph of olanzapine, dihydrate form and process for its preparation and a new hydrate form of olanzapine having moisture content 1 -3% and process for its preparation

IT 205485-16-1P, Olanzapine dihydrate

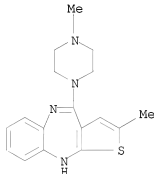
928835-85-2P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (process for producing pure and stable form of

2-Me-4-(4-Me-1-piperazinyl)-10h-thieno[2,3-b] [1,5]benzodiazepine)

RN 205485-16-1 HCAPLUS

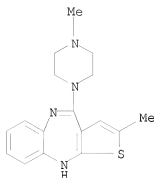
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:2) (CA INDEX NAME)



● 2 H<sub>2</sub>O

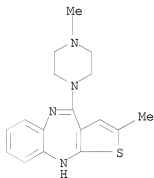
RN 928835-85-2 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:?) (CA INDEX NAME)



● x H<sub>2</sub>O

IT 132539-06-1P, Olanzapine  
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);  
 BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (process for producing pure and stable form of  
 2-Me-4-(4-Me-1-piperazinyl)-10h-thieno[2,3-b] [1,5]benzodiazepine)  
 RN 132539-06-1 HCAPLUS  
 CN 10H-Thieno[2,3-b] [1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 17 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:1029262 HCAPLUS  
 DOCUMENT NUMBER: 147:427372  
 TITLE: Method for preparation of Olanzapine  
 crystal form I  
 INVENTOR(S): Wang, Peng; Gan, Lixin  
 PATENT ASSIGNEE(S): Zhejiang Huahai Pharmaceutical Co., Ltd., Peop. Rep.  
 China  
 SOURCE: Faming Zhuanli Shengqing Gongkai Shuomingshu, 12pp.  
 CODEN: CNXXEV  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101033232	A	20070912	CN 2007-10067892	20070330

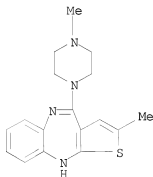
PRIORITY APPLN. INFO.:  
 CN 2007-10067892 20070330

AB Olanzapine crystal form I was prepared from crude Olanzapine, dissolving in organic solvent and decoloring with active carbon to obtain high purity Olanzapine (HPLC greater than 99.5%), after that redissolving in methylene chloride, filtering, and spray-drying to get solid crystal. The organic solvent is C1-7 alc., C3-7 ketone, C3-7 ester, or C3-7 ether, or mixed solvent of chloroform, acetonitrile, and two or more of the above solvents in a random ratio. The X-ray powder diffraction spectrum of Olanzapine crystal form I under Cu-K $\alpha$  radiation and IR absorption spectrum measured by KBr pressed disk method are characterized. The method has the advantages of high yield (greater than 90%), high product purity, and low cost.

IT 132539-06-1P, Olanzapine  
 RL: PRP (Properties); PUR (Purification or recovery); PREP (Preparation)  
 (preparation of Olanzapine crystal form I)

RN 132539-06-1 HCAPLUS

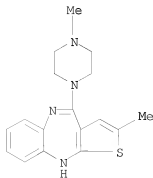
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)





L27 ANSWER 18 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:963766 HCAPLUS  
 DOCUMENT NUMBER: 147:308040  
 TITLE: Preparation of anhydrous olanzapine form I  
 INVENTOR(S): Alla, Venkat Reddy; Vyakaranam, Kameswara Rao;  
 Sirigiri, Aruna Kumari; Bodapati, Srinivas Reddy;  
 Billa, Ranadheer Reddy  
 PATENT ASSIGNEE(S): Lee Pharma Limited, India  
 SOURCE: PCT Int. Appl., 20pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007096895	A1	20070830	WO 2006-IN130	20060417
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM IN 2006CH00328 A 20071123 IN 2006-CH328 20060227 PRIORITY APPLN. INFO.: IN 2006-CH328 A 20060227 AB A product of anhydrous olanzapine of Form I as characterized and described by a study of x-ray diffraction, IR, 1H NMR, and 13C NMR spectroscopy. IT 132539-06-1, Olanzapine RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of anhydrous olanzapine form I) RN 132539-06-1 HCAPLUS CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)				



10/591,831

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 19 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:819070 HCAPLUS

DOCUMENT NUMBER: 147:197377

TITLE: Novel polymorph E of olanzapine and preparation of anhydrous non-solvated crystalline polymorphic form I of 2-methyl-4-(4-methyl-1-piperazinyl)-10h-thieno[2,3-b][1,5] benzodiazepine (olanzapine form i) from the polymorphic olanzapine form e

INVENTOR(S): Ray, Anup Kumar; V. Patel, Hiren Kumar; Ludescher, Johannes; Patel, Mahendra R.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 13pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070173496	A1	20070726	US 2006-340284	20060126
WO 2007087555	A2	20070802	WO 2007-US60958	20070124
WO 2007087555	A3	20071025		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: US 2006-340284 A 20060126

AB The invention provides an Olanzapine pseudopolymorph Form E. The invention provides methods of preparing polymorphic Olanzapine Form E employing rapid crystallization and seeding. The invention provides methods of preparing anhydrous Olanzapine Form I from the Olanzapine Form E by step-wise drying.

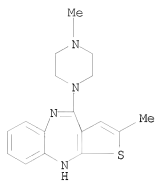
IT 132539-06-1P, Olanzapine

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (polymorph E of olanzapine and preparation of anhydrous non-solvated crystalline polymorphic form I of 2-methyl-4-(4-methyl-1-piperazinyl)-10h-thieno[2,3-b][1,5] benzodiazepine (olanzapine form I) from polymorphic olanzapine form E)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

10/591,831



L27 ANSWER 20 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:728826 HCAPLUS

DOCUMENT NUMBER: 147:125589

TITLE: Oral formulation of anhydrous olanzapine form I

INVENTOR(S): Diez Martin, Ignacio; Ubeda Perez, Carmen; Pablo Alba, Pablo

PATENT ASSIGNEE(S): Laboratorios Lesvi, S.L., Spain

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007074110	A1	20070705	WO 2006-EP69905	20061219
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
ES 2279715	A1	20070816	ES 2005-3183	20051226
ES 2279715	B1	20080601		
EP 1965773	A1	20080910	EP 2006-841451	20061219
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS			
JP 2009521518	T	20090604	JP 2008-547947	20061219
US 20080311203	A1	20081218	US 2008-159030	20080624
KR 2008080230	A	20080902	KR 2008-718344	20080725
PRIORITY APPLN. INFO.:			ES 2005-3183	A 20051226
			US 2005-754104P	P 20051227
			WO 2006-EP69905	W 20061219

AB The invention relates to a solid formulation for the oral administration of olanzapine that comprises a core of anhydrous olanzapine Form I or a pharmaceutically acceptable salt thereof and, optionally, pharmaceutically acceptable excipients, said core being coated with a functional polymer that acts as film-forming agent. The method for obtaining it comprises: i) providing anhydrous olanzapine Form I or a salt thereof and, optionally, pharmaceutically acceptable excipients in solid form; ii) providing a functional polymer that acts as film former; iii) preparing a dispersion of said functional polymer in an aqueous medium, -

and

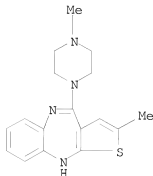
applying the dispersion obtained in step iii) onto the solid form of step i) . A composition contains olanzapine form I, lactose monohydrate, microcryst. cellulose, low-substituted, hydropropyl cellulose, Crospovidone, anhydrous colloidal silica, and Mg stearate.

IT 132539-06-1, Olanzapine

RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU  
(Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(oral formulation of anhydrous olanzapine form I)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)

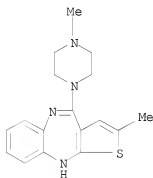


REFERENCE COUNT:

4

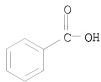
THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 21 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:531306 HCAPLUS  
 DOCUMENT NUMBER: 148:483731  
 TITLE: Crystal structure of olanzapinium benzoate (1:1)  
 AUTHOR(S): Sridhar, B.; Ravikumar, K.  
 CORPORATE SOURCE: Laboratory of X-ray Crystallography, Indian Institute of Chemical Technology, Hyderabad, 500007, India  
 SOURCE: Journal of Structural Chemistry (2007), 48(1), 198-202  
 CODEN: JSTCAM; ISSN: 0022-4766  
 PUBLISHER: Springer  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Olanzapinium benzoate, 1-methyl-4-(2-methyl-10H-thieno[2,3-b][1,5]benzodiazepin-4-yl)-piperazin-1-ium benzoate, (C17H21N4S)+(C7H5O2)- (I), crystallizes in triclinic space group P.hivin.1 with a 9.2957(6), b 11.2416(7), c 12.0003(8) Å;  $\alpha$  64.585(1),  $\beta$  87.568(1),  $\gamma$  83.248(1)°. Crystallog. data and atomic coordinates are given. The asym. part of the structure comprises a singly charged olanzapinium cation and a singly charged benzoate anion. The central 1,5-diazepine ring adopts the expected boat conformation, while the piperazine ring favors the chair conformation. The olanzapinium and benzoate ions are linked by intermol. N-H...O H bonds forming infinite chains running along the c-axis of the crystal.  
 IT 861390-70-7, Olanzapinium benzoate  
 RL: PRP (Properties)  
 (crystal structure of)  
 RN 861390-70-7 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, benzoate (1:1) (CA INDEX NAME)  
 CM 1  
 CRN 132539-06-1  
 CMF C17 H20 N4 S



CM 2  
 CRN 65-85-0  
 CMF C7 H6 O2

10/591,831



REFERENCE COUNT:

16

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



L27 ANSWER 22 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:286797 HCAPLUS

DOCUMENT NUMBER: 146:323378

TITLE: Pharmaceutical co-crystal compositions of drugs

INVENTOR(S): Almarsson, Oern; Bourghol Hickey, Magali; Peterson, Matthew; Zaworotko, Michael J.; Moulton, Brian; Rodriguez-Hornedo, Nair

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 92pp., Cont.-in-part of U.S. Ser. No. 601,092.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070059356	A1	20070315	US 2005-546963	20050826
WO 2003074474	A2	20030912	WO 2003-US6662	20030303
WO 2003074474	A3	20031218		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 20040019211	A1	20040129	US 2003-449307	20030530
US 7078526	B2	20060718		
WO 2004000284	A1	20031231	WO 2003-US19574	20030620
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 20050025791	A1	20050203	US 2003-601092	20030620
WO 2004078161	A1	20040916	WO 2003-US27772	20030904
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

WO 2004061433 A1 20040722 WO 2003-US41273 20031224  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

WO 2004063152 A2 20040729 WO 2004-US400 20040108  
WO 2004063152 A3 20041111  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ

WO 2004078163 A2 20040916 WO 2004-US6288 20040226  
WO 2004078163 A3 20050120  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI  
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 20060140985 A1 20060629 US 2005-541703 20050708  
PRIORITY APPLN. INFO.: US 2002-384152P P 20020531  
US 2002-390881P P 20020621  
US 2002-426275P P 20021114  
US 2002-427086P P 20021115  
US 2002-429515P P 20021126  
US 2002-437516P P 20021230  
US 2003-439282P P 20030110  
US 2003-444315P P 20030131  
US 2003-451213P P 20030228  
WO 2003-US6662 A 20030303  
US 2003-456027P P 20030318  
US 2003-463962P P 20030418  
US 2003-449307 A2 20030530  
US 2003-601092 A2 20030620  
WO 2003-US19574 A 20030620  
WO 2003-US27772 A 20030904  
WO 2003-US41273 A 20031224  
WO 2004-US6288 W 20040226  
US 2002-360768P P 20020301  
US 2003-439283P P 20030110  
US 2003-441335P P 20030121  
US 2003-378956 A 20030303  
US 2003-456608P P 20030321  
US 2003-459501P P 20030401  
US 2003-486713P P 20030711  
US 2003-487064P P 20030711  
US 2003-637829 A 20030808  
US 2003-660202 A2 20030911  
WO 2003-US28982 A2 20030916

US 2003-508208P	P 20031002
WO 2004-US400	W 20040108
US 2004-542752P	P 20040206

AB A pharmaceutical composition comprises a co-crystal of an active pharmaceutical ingredient (API) and a co-crystal former; wherein the API has at least one functional group, e.g., ether, alc., acid, amide, heterocyclic ring, etc., such that the API and co-crystal former are capable of co-crystallizing from a solution phase under crystallization conditions. Example cocrystals prepared are 1:1 celecoxib-nicotinamide and celecoxib-18-crown-6. Dissoln. was determined for a number of cocrystals. Also data for H-bonding functional groups with compds. such as amines, amides, and alcs. were given.

IT 922167-04-2P 929024-70-4P  
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (pharmaceutical co-crystal compns. of drugs)

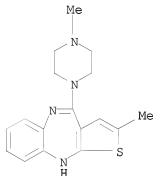
RN 922167-04-2 HCAPLUS

CN 3-Pyridinecarboxamide, compd. with  
 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine  
 (1:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1

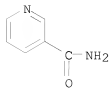
CMF C17 H20 N4 S



CM 2

CRN 98-92-0

CMF C6 H6 N2 O



RN 929024-70-4 HCAPLUS

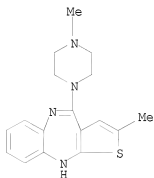
10/591,831

CN 3-Pyridinecarboxamide, compd. with  
2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine  
(2:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1

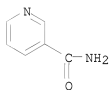
CMF C17 H20 N4 S



CM 2

CRN 98-92-0

CMF C6 H6 N2 O



L27 ANSWER 23 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:265980 HCAPLUS

DOCUMENT NUMBER: 146:448301

TITLE: Synergistic pharmaceutical compositions containing olanzapine and analgetic drugs

INVENTOR(S): Shannon, Harlan E.; Womer, Daniel E.

PATENT ASSIGNEE(S): Eli Lilly and Co., USA

SOURCE: Hung. Pat. Appl., 38 pp.

CODEN: HUXXCV

DOCUMENT TYPE: Patent

LANGUAGE: Hungarian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
HU 9903375	A2	20000228	HU 1999-3375	19970324
HU 9903375	A3	20000428		

PRIORITY APPLN. INFO.: HU 1999-3375 19970324

AB The subject of the invention is a pharmaceutical product, which contains olanzapine or its medically acceptable salt and one or more pain relieving active ingredients. The product according to the invention has a synergetic effect. Thus tablets were prepared from a composition (weight parts):

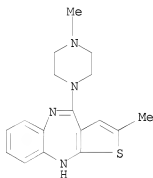
hydroxypropyl cellulose 4.0; olanzapine 1.18; ibuprofen 3.0; lactose 79.32; Crospovidon 5; cellulose 10; magnesium stearate 0.5. The tablets were coated with a mixture of hydroxypropyl methylcellulose, polyethylene glycol, polysorbate 80 and titania.

IT 132539-06-1, Olanzapine

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(synergistic pharmaceutical compns. containing olanzapine and analgetic drugs)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)



IT 132539-06-1D, Olanzapine, salts, solvates

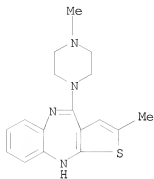
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)

(synergistic pharmaceutical compns. containing olanzapine and analgetic drugs)

10/591,831

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)



L27 ANSWER 24 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:254444 HCAPLUS

DOCUMENT NUMBER: 148:61904

TITLE: Crystalline form I of  
2-methyl-4-(4-methyl-1-piperazinyl)-  
10H-thieno[2,3-b][1,5]benzodiazepineINVENTOR(S): Chhanga, Chhabada Vijay; Budhdev, Rehani Rajeev;  
Rajamamannar, Thennati

PATENT ASSIGNEE(S): Sun Pharmaceutical Industries Ltd., India

SOURCE: Indian Pat. Appl., 30pp.

CODEN: INXXBQ

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

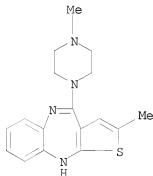
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	IN 2001MU01210	A	20050304	IN 2001-MU1210	20011224
PRIORITY APPLN. INFO.:				IN 2001-MU1210	20011224

AB Crystalline form I of 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (olanzapine) is characterized by x-ray powder diffraction and IR spectroscopy. Its color is stable under ambient conditions of storage; and the process of its preparation comprises 2 repetitive steps of crystallization from organic solvents by dissolving the in the solvents and allowing crystallization to occur, wherein in 1 step the solution is purified by treating with a solid absorbent material and filtering, and wherein in the last step the crystalline material is subjected to drying.

IT 132539-06-1P, Olanzapine  
 RL: PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (crystalline form I of  
 methyl(methylpiperazinyl)thienobenzodiazepine)

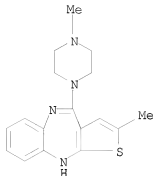
RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)

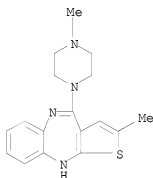
L27 ANSWER 25 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:197406 HCAPLUS  
 DOCUMENT NUMBER: 146:236152  
 TITLE: A process for making olanzapine Form I  
 INVENTOR(S): Keltjens, Rolf  
 PATENT ASSIGNEE(S): Synthon B. V., Neth.  
 SOURCE: PCT Int. Appl., 23pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007020080	A1	20070222	WO 2006-EP8096	20060816
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
EP 1919923	A1	20080514	EP 2006-776901	20060816
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS			
US 20070066602	A1	20070322	US 2006-465428	20060817
PRIORITY APPLN. INFO.:			US 2005-708774P	P 20050817
			WO 2006-EP8096	W 20060816
AB	The invention relates to a process for making olanzapine Form I, which comprises: reacting in an aqueous environment olanzapine benzoate with a watersol. base to form olanzapine solids; isolating and drying said olanzapine solids to form olanzapine Form I, and to the use of olanzapine benzoate, preferably as an aqueous slurry in preparing olanzapine Form I.			
IT	132539-06-1, Olanzapine RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (process for making olanzapine Form I)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)			

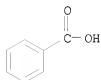




IT 861390-70-7, Olanzapine benzoate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (process for making olanzapine Form I)  
 RN 861390-70-7 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
 2-methyl-4-(4-methyl-1-piperazinyl)-, benzoate (1:1) (CA INDEX NAME)  
 CM 1  
 CRN 132539-06-1  
 CMF C17 H20 N4 S



CM 2  
 CRN 65-85-0  
 CMF C7 H6 O2



10/591,831

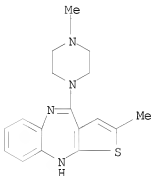
REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

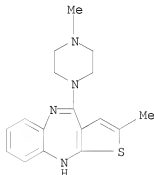
L27 ANSWER 26 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:181484 HCAPLUS  
 DOCUMENT NUMBER: 146:365595  
 TITLE: Oral olanzapine tablet formulations with  
 coating containing polyethylene glycol  
 INVENTOR(S): Reddy, Pallemalli Venkata Siva; Reddy, Billa Praveen;  
 Mohan, Mailatur Sivaraman  
 PATENT ASSIGNEE(S): Dr. Reddy's Laboratories Ltd., India  
 SOURCE: Indian Pat. Appl., 14pp.  
 CODEN: INXXBQ  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 2002MA00235	A	20050304	IN 2002-MA235	20020401
PRIORITY APPLN. INFO.:			IN 2002-MA235	20020401
AB The present invention is directed towards the oral tablet dosage form of olanzapine consisting essentially of the polyethylene glycol coating applied directly on the core tablet containing olanzapine Form I polymorph as active ingredient. The coated tables of olanzapine prepared in accordance with the present invention have acceptable stability as per ICH guidelines and are bioequivalent to the com. available Zyprexa tablets.				
IT 132539-06-1, Olanzapine				
RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)				
(oral olanzapine tablet formulations with coating containing polyethylene glycol)				
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)			



L27 ANSWER 27 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:181193 HCAPLUS  
 DOCUMENT NUMBER: 146:358886  
 TITLE: Novel olanzapine monohydrate-I and  
 a process for preparation thereof  
 INVENTOR(S): Reguri, Buchi Reddy; Chakka, Ramesh  
 PATENT ASSIGNEE(S): Dr. Reddy's Laboratories Ltd., India  
 SOURCE: Indian Pat. Appl., 18pp.  
 CODEN: INXXBQ  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 2002MA00154	A	20050304	IN 2002-MA154	20020228
PRIORITY APPLN. INFO.:			IN 2002-MA154	20020228
OTHER SOURCE(S):	CASREACT 146:358886			
AB	The invention is directed to Olanzapine monohydrate-I. The invention further provides a process for the preparation of Olanzapine monohydrate-I, which is a com. viable process and well suited for industrial scale up. Olanzapine monohydrate was prepared by amination of 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine hydrochloride with N-methylpiperazine. The crystal structure of Olanzapine monohydrate was also determined			
IT	402586-77-0P RL: IMF (Industrial manufacture); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and crystal structure of olanzapine monohydrate via amination of amino(methyl)thienobenzodiazepine hydrochloride with methylpiperazine)			
RN	402586-77-0 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:1) (CA INDEX NAME)			



L27 ANSWER 28 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

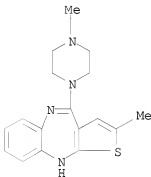
ACCESSION NUMBER: 2007:181157 HCAPLUS  
 DOCUMENT NUMBER: 146:507560  
 TITLE: Hydrated form of olanzapine and process for preparation thereof  
 INVENTOR(S): Reguri, Buchi Reddy; Chakka, Ramesh  
 PATENT ASSIGNEE(S): Dr. Reddy's Laboratories Ltd., India  
 SOURCE: Indian Pat. Appl., 18pp.  
 CODEN: INXXBQ  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 2002MA00496	A	20050304	IN 2002-MA496	20020701
PRIORITY APPLN. INFO.:			IN 2002-MA496	20020701

AB The object of the present invention is to provide the novel crystalline forms of olanzapine monohydrate. The present invention also provides a process for the preparation of novel olanzapine monohydrate. The process for the preparation of these hydrated forms comprises the dissolution of crystalline form of olanzapine in a mixture of water and an alc. using trifluoroacetic acid and further adjusting the pH of the mass towards basic with a known base to afford the hydrated forms of olanzapine. The present process is simple, eco-friendly and well suited for industrial scale up.

IT 132539-06-1, Olanzapine  
 RL: PRP (Properties); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)  
 (hydrated form of olanzapine and process for preparation thereof)

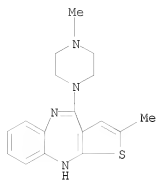
RN 132539-06-1 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



IT 402586-77-0P, Olanzapine monohydrate  
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (hydrated form of olanzapine and process for preparation thereof)

RN 402586-77-0 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:1) (CA INDEX NAME)

10/591,831



● H<sub>2</sub>O

L27 ANSWER 29 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:181154 HCAPLUS  
 DOCUMENT NUMBER: 146:365589  
 TITLE: A process for the preparation of olanzapine dihydrate  
 INVENTOR(S): Reguri, Buchi Reddy; Chakka, Ramesh  
 PATENT ASSIGNEE(S): Dr. Reddy's Laboratories, India  
 SOURCE: Indian Pat. Appl., 19pp.  
 CODEN: INXXBQ  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

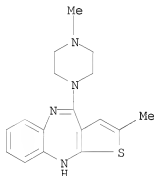
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 2001MA00738	A	20050304	IN 2001-MA738	20010906
PRIORITY APPLN. INFO.:			IN 2001-MA738	20010906

AB The present invention relates to a simple method for conversion of olanzapine dehydrate to olanzapine Form 1 by recrystn. of olanzapine dihydrate in dichloromethane. The process adopted herein is com. viable and well suited for industrial scale up. Olanzapine dihydrate was prepared by the reaction of olanzapine with N-methylpiperazine and the product was characterized by x-ray crystallog.

IT 205485-16-1P, Olanzapine dihydrate  
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (process for preparation of olanzapine dihydrate)

RN 205485-16-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
 2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:2) (CA INDEX NAME)



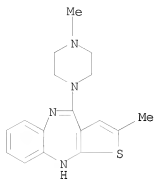
● 2 H<sub>2</sub>O

IT 132539-06-1, Olanzapine  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (process for preparation of olanzapine dihydrate)

RN 132539-06-1 HCAPLUS

10/591,831

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)





L27 ANSWER 30 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:159389 HCAPLUS

DOCUMENT NUMBER: 146:316350

TITLE: Crystal structure of olanzapine and its solvates. Part 3. Two and three-component solvates with water, ethanol, butan-2-ol and dichloromethane

AUTHOR(S): Wawrzycka-Gorczyca, Irena; Borowski, Piotr; Osypuk-Tomasik, Joanna; Mazur, Liliana; Koziol, Anna E.

CORPORATE SOURCE: Faculty of Chemistry, Department of Crystallography, Maria Curie-Skłodowska University, Lublin, 20-031, Pol.

SOURCE: Journal of Molecular Structure (2007), 830(1-3), 188-197

CODEN: JMOSB4; ISSN: 0022-2860

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Crystalline solvates of olanzapine (1), 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine, have been characterized by an X-ray anal. and thermal (DSC) data.

## Crystallization

of 1 from ethanol gives a solid containing both water and ethanol mols.; the solvate 1·H<sub>2</sub>O·EtOH (2:2:1) is monoclinic with the space group P2<sub>1</sub>/c and the unit-cell volume V = 3752.8(12) Å<sup>3</sup>. Butan-2-ol forms with 1 solvate which is also a three-component phase, 1·H<sub>2</sub>O·BuOH, but its stoichiometry is different (1:1:1). The space group for this crystal is P2<sub>1</sub>/c and the unit-cell volume V = 2216.5(7) Å<sup>3</sup>. Crystalline olanzapine dichloromethane solvate (2:1), 1·CH<sub>2</sub>Cl<sub>2</sub>, is triclinic with the space group P<sub>1</sub>h<sub>1</sub>in.1. The characteristic feature of all crystal structures is presence of a pair of olanzapine mols. which form dimer stabilized by multiple weak C-H...π interactions between the N-methylpiperazine fragment and the Ph / thiophene systems. Theor. calcns. have been performed indicating that the total C-H...π binding energy is about 8 kcal mol<sup>-1</sup>. In the crystal structure, the self-assembled olanzapine mol. dimers are arranged into parallel crystal planes. Packing of the layers proceeds in two ways in which structural motives are replicated by (i) perpendicular translation forming columns, and (ii) rotation around the twofold screw axis (parallel to the layer).

IT 647826-03-7 928835-79-4 928835-81-8  
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(crystallog. and thermal desolvation; crystal structure olanzapine two- and three-component solvates with water, ethanol, butan-2-ol and dichloromethane)

RN 647826-03-7 HCAPLUS

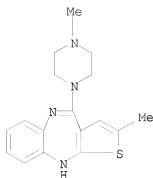
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, dichloromethane (2:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S

10/591,831



CM 2

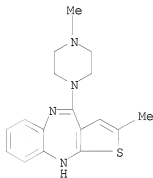
CRN 75-09-2  
CMF C H2 Cl2

Cl-CH<sub>2</sub>-Cl

RN 928835-79-4 HCAPLUS  
CN Ethanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine, hydrate (1:2:2) (CA INDEX NAME)

CM 1

CRN 132539-06-1  
CMF C17 H20 N4 S



CM 2

CRN 64-17-5  
CMF C2 H6 O

10/591,831



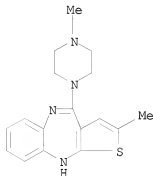
RN 928835-81-8 HCAPLUS

CN 2-Butanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine, hydrate (1:1:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1

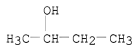
CMF C17 H20 N4 S



CM 2

CRN 78-92-2

CMF C4 H10 O



IT 928835-85-2

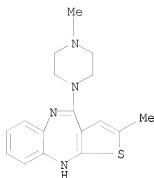
RL: PRP (Properties)

(crystallog.; crystal structure olanzapine

two- and three-component solvates with water, ethanol, butan-2-ol and dichloromethane)

RN 928835-85-2 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:?) (CA INDEX NAME)



● x H<sub>2</sub>O

IT 182808-49-7

RL: PEP (Physical, engineering or chemical process); PROC (Process)  
(thermal desolvation; crystal structure  
olanzapine two- and three-component solvates with water,  
ethanol, butan-2-ol and dichloromethane)

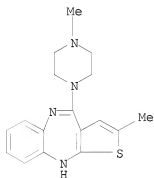
RN 182808-49-7 HCAPLUS

CN Methanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S



CM 2

CRN 67-56-1

CMF C H4 O

10/591,831

H<sub>3</sub>C-OH

OS.CITING REF COUNT:	2	THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT:	38	THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 31 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:127685 HCAPLUS

DOCUMENT NUMBER: 146:280565

TITLE: Quantification of olanzapine polymorphs using powder X-ray diffraction technique

AUTHOR(S): Tiwari, Manisha; Chawla, Garima; Bansal, Arvind K.

CORPORATE SOURCE: Department of Pharmaceutical Technology (Formulations), National Institute of Pharmaceutical Education and Research (NIPER), SAS Nagar, Punjab, 160062, India

SOURCE: Journal of Pharmaceutical and Biomedical Analysis (2007), 43(3), 865-872

CODEN: JPBADA; ISSN: 0731-7085

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

**AB** Accurate quantification of crystalline phases present in drug materials is becoming increasingly important, due to stringent regulatory concerns about polymorph characterization and control in drug substances and products. In the present study, a quantification method for polymorphic forms of olanzapine has been developed using powder x-ray diffraction (PXRD). Preferred orientation has been reported to be the major source of error in PXRD anal., therefore, prior to development of a quantification method, pure polymorphic forms (I and II) of different size ranges were analyzed. Preferred orientation effect was found to decrease on using sieve fraction BSS # 120/240 for form I. In order to obtain good peak resolution in optimum time, the step time and step size were varied so as to optimize the scan rate. Among the five combinations selected, step size of 0.05° with step time of 5 s demonstrated identification of four characteristic peaks of form I in form II in 62 min. A calibration curve was constructed in the range of 0-100% (weight/weight) using the characteristic peak of form I at 18.48° 2 $\theta$  (I/I0 78.8%). The PXRD assay was reproducible and precise and displayed a LOD of 0.40% (weight/weight) and LOQ of 1.22% (weight/weight).

Validation results showed excellent correlation between actual and predicted concns. with R2 0.9999.

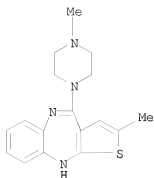
**IT** 132539-06-1, Olanzapine

RL: ANT (Analyte); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)

(olanzapine polymorphs quantification using powder x-ray diffraction)

**RN** 132539-06-1 HCAPLUS

**CN** 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



OS.CITING REF COUNT:	4	THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
REFERENCE COUNT:	22	THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 32 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:119077 HCAPLUS

DOCUMENT NUMBER: 146:212835

TITLE: Pharmaceutical co-crystal compositions

INVENTOR(S): Almarsson, Orn; Bourghol Hickey, Magali; Peterson, Matthew L.; Zaworotko, Michael J.; Moulton, Brian; Rodriguez-Hornedo, Nair

PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA; University of South Florida; The Regents of the University of Michigan

SOURCE: U.S. Pat. Appl. Publ., 102 pp., Cont.-in-part of Appl. No. PCT/US03/27772.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070026078	A1	20070201	US 2003-660202	20030911
US 6559293	B1	20030506	US 2002-232589	20020903
US 20030166581	A1	20030904	US 2002-295995	20021118
US 6699840	B2	20040302		
US 20030224006	A1	20031204	US 2003-378956	20030303
US 20040019211	A1	20040129	US 2003-449307	20030530
US 7078526	B2	20060718		
US 20050025791	A1	20050203	US 2003-601092	20030620
US 20040053853	A1	20040318	US 2003-637829	20030808
WO 2004078161	A1	20040916	WO 2003-US27772	20030904
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2511881	A1	20040722	CA 2003-2511881	20031224
WO 2004061433	A1	20040722	WO 2003-US41273	20031224
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, BG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003303591	A1	20040729	AU 2003-303591	20031224
EP 1579198	A1	20050928	EP 2003-808567	20031224
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
JP 2006517527	T	20060727	JP 2005-508617	20031224



US 20070015841	A1	20070118	US 2003-747742	20031229
WO 2004063152	A2	20040729	WO 2004-US400	20040108
WO 2004063152	A3	20041111		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ			
CA 2514733	A1	20040916	CA 2004-2514733	20040226
WO 2004078163	A2	20040916	WO 2004-US6288	20040226
WO 2004078163	A3	20050120		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA, NI, RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1631260	A2	20060308	EP 2004-715190	20040226
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
JP 2007524596	T	20070830	JP 2006-508979	20040226
WO 2004089313	A2	20041021	WO 2004-US9947	20040331
WO 2004089313	A3	20051124		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 20050070551	A1	20050331	US 2004-926842	20040826
US 7446107	B2	20081104		
AU 2004270238	A1	20050317	AU 2004-270238	20040904
CA 2534664	A1	20050317	CA 2004-2534664	20040904
WO 2005023198	A2	20050317	WO 2004-US29013	20040904
WO 2005023198	A3	20050714		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1670753	A2	20060621	EP 2004-783308	20040904
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR			
BR 2004013777	A	20061107	BR 2004-13777	20040904
CN 1874993	A	20061206	CN 2004-80031982	20040904

JP 2007513867	T	20070531	JP 2006-525508	20040904
ZA 2004007377	A	20051004	ZA 2004-7377	20040914
US 20060134198	A1	20060622	US 2005-541216	20050629
US 20060140985	A1	20060629	US 2005-541703	20050708
US 20060223794	A1	20061005	US 2005-551014	20050929
NO 2006000669	A	20060602	NO 2006-669	20060210
IN 2006KN00371	A	20070622	IN 2006-KN371	20060220
MX 2006002507	A	20060620	MX 2006-2507	20060302
KR 2006128831	A	20061214	KR 2006-704425	20060303
US 20070021510	A1	20070125	US 2006-570405	20060303
US 7566805	B2	20090728		
US 20090088443	A1	20090402	US 2008-234420	20080919
PRIORITY APPLN. INFO.:			US 2002-356764P	P 20020215
			US 2002-360768P	P 20020301
			US 2002-380288P	P 20020515
			US 2002-384152P	P 20020531
			US 2002-406974P	P 20020830
			US 2002-232589	A1 20020903
			US 2002-295995	A3 20021118
			US 2003-439282P	P 20030110
			US 2003-444315P	P 20030131
			US 2003-451213P	P 20030228
			US 2003-378956	A2 20030303
			US 2003-463962P	P 20030418
			US 2003-449307	A2 20030530
			US 2003-601092	A2 20030620
			US 2003-487064P	P 20030711
			US 2003-637829	A2 20030808
			WO 2003-US27772	A2 20030904
			US 2002-390881P	P 20020621
			US 2002-426275P	P 20021114
			US 2002-427086P	P 20021115
			US 2002-428515P	P 20021122
			US 2002-429515P	P 20021126
			US 2002-437516P	P 20021230
			US 2003-439283P	P 20030110
			US 2003-441335P	P 20030121
			WO 2003-US6662	A 20030303
			US 2003-456027P	P 20030318
			US 2003-456608P	P 20030321
			US 2003-459501P	P 20030401
			WO 2003-US17184	A2 20030530
			WO 2003-US19574	A 20030620
			US 2003-486713P	P 20030711
			US 2003-327772	A 20030904
			US 2003-660202	A 20030911
			WO 2003-US28982	A 20030916
			US 2003-508208P	P 20031002
			WO 2003-US41273	W 20031224
			US 2003-747742	A 20031229
			US 2004-747742	A1 20031229
			WO 2003-US41642	A 20031229
			WO 2004-US400	W 20040108
			US 2004-542752P	P 20040206
			WO 2004-US6288	W 20040226
			US 2004-548343P	P 20040227
			WO 2004-US9947	W 20040331

US 2004-560411P	P	20040406
US 2004-573412P	P	20040521
US 2004-579176P	P	20040612
US 2004-581992P	P	20040622
US 2004-586752P	P	20040709
US 2004-588236P	P	20040715
US 2004-590590P	P	20040723
US 2004-926842	A3	20040826
WO 2004-US29013	W	20040904

AB A pharmaceutical composition comprising a co-crystal of an active pharmaceutical ingredient (API) and a co-crystal former; wherein the API has at least one functional group selected from ether, thioether, alc., thiol, aldehyde, ketone, thioketone, nitrate ester, phosphate ester, thiophosphate ester, ester, thioester, sulfate ester, carboxylic acid, phosphonic acid, phosphinic acid, sulfonic acid, amide, primary amine, secondary amine, ammonia, tertiary amine, thiocyanate, cyanamide, oxime, nitrile diazo, organo-halide, nitro, s-heterocyclic ring, thiophene, N-heterocyclic ring, pyrrole, O-heterocyclic ring, furan, epoxide, peroxide, hydroxamic acid, imidazole, pyridine and the co-crystal former has at least one functional group selected from amine, amide, pyridine, imidazole, indole, pyrrolidine, carbonyl, carboxyl, hydroxyl, phenol, sulfone, sulfonyl, mercapto and Me thio, such that the API and co-crystal former are capable of co-crystallizing from a solution phase under crystallization conditions. Thus, 1:1 celecoxib:nicotinamide co-crystals were prepared by reacting celecoxib and nicotinamide in acetone solution

IT 756835-49-1P 922167-04-2P  
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (pharmaceutical co-crystal compns.)

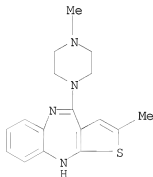
RN 756835-49-1 HCAPLUS

CN 3-Pyridinecarboxamide, compd. with  
 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine  
 (1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1

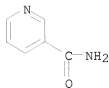
CMF C17 H20 N4 S



CM 2

10/591,831

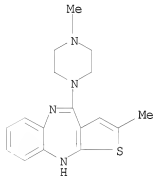
CRN 98-92-0  
CMF C6 H6 N2 O



RN 922167-04-2 HCAPLUS  
CN 3-Pyridinecarboxamide, compd. with  
2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine  
(1:1) (CA INDEX NAME)

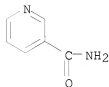
CM 1

CRN 132539-06-1  
CMF C17 H20 N4 S



CM 2

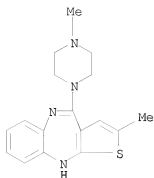
CRN 98-92-0  
CMF C6 H6 N2 O



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

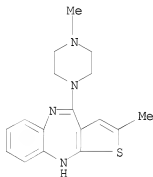
L27 ANSWER 33 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:90732 HCAPLUS  
 DOCUMENT NUMBER: 146:169386  
 TITLE: A process and composition for making  
 olanzapine form I  
 INVENTOR(S): Keltjens, Rolf; Thijs, Lambertus  
 PATENT ASSIGNEE(S): Synthon B.V., Neth.  
 SOURCE: PCT Int. Appl., 18pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007009788	A1	20070125	WO 2006-EP7138	20060720
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
US 20070021605	A1	20070125	US 2006-458513	20060719
PRIORITY APPLN. INFO.:			US 2005-700717P	P 20050720
AB	The invention relates to a process for making crystalline olanzapine Form (I), which comprises reducing the pressure of a gas/supercrit. fluid composition comprising carbon dioxide and olanzapine to precipitate crystalline olanzapine form (I) from the composition			
IT	132539-06-1, Olanzapine RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (process and composition for making olanzapine form I)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)			



OS.CITING REF COUNT:	1	THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT:	2	THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 34 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2006:1162271 HCAPLUS  
 DOCUMENT NUMBER: 146:32633  
 TITLE: Solid state characterization of olanzapine polymorphs using vibrational spectroscopy  
 AUTHOR(S): Ayala, A. P.; Siesler, H. W.; Boese, R.; Hoffmann, G. G.; Polla, G. I.; Vega, D. R.  
 CORPORATE SOURCE: Department of Physical Chemistry, University of Duisburg-Essen, Essen, D45117, Germany  
 SOURCE: International Journal of Pharmaceutics (2006), 326(1-2), 69-79  
 CODEN: IJPHDE; ISSN: 0378-5173  
 PUBLISHER: Elsevier Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB FT-Raman, IR and near IR investigations of 2 polymorphs of olanzapine are presented, establishing the main features that allow the discrimination of these crystalline forms using vibrational spectroscopic methods. Ab initio calcns. on the basis of the d. functional theory were used to determine the stable conformations. The calculated vibrational spectra were compared to the exptl. ones to identify the conformers corresponding to each polymorph and to assign the vibrational bands to the internal vibrations of the olanzapine mol. The authors' results support the hydrogen bonding pattern proposed by the reported crystalline structure and provide valuable information on the structural and thermodynamical relationship between the investigated polymorphs.  
 IT 132539-06-1, Olanzapine  
 RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (solid state characterization of olanzapine polymorphs using vibrational spectroscopy)  
 RN 132539-06-1 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)  
 REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 35 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:1005866 HCAPLUS

DOCUMENT NUMBER: 145:363423

TITLE: Process for preparing crystalline form I of olanzapine

INVENTOR(S): Sundaram, Venkataraman; Pandurang, Sharat Narsapur; Dayaram, Vishal Parmar; Bommareddy, Siva Kumar Reddy; Sitaram, Hitendra Chaudhary

PATENT ASSIGNEE(S): Dr. Reddy's Laboratories Ltd., India; Dr. Reddy's Laboratories, Inc.

SOURCE: PCT Int. Appl., 22pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006102176	A2	20060928	WO 2006-US9911	20060320
WO 2006102176	A3	20070118		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 1863775	A2	20071212	EP 2006-738901	20060320
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
IN 2007CN04197	A	20071123	IN 2007-CN4197	20070924
KR 2007113277	A	20071128	KR 2007-722692	20071004
PRIORITY APPLN. INFO.: IN 2005-CH291 A 20050321 US 2005-677115P P 20050503 WO 2006-US9911 W 20060320				

AB A process for preparing olanzapine Form I comprises: cooling a concentrated solution of olanzapine; isolating wet crystals of olanzapine Form I; and drying wet crystals and recovering olanzapine Form I. Drying can be conducted by stepwise increases in the drying temps., with extended holding times at each temperature condition. Olanzapine monohydrate was mixed with methylene chloride and the suspension was heated to obtain a clear solution and the resultant solution was filtered through a perlite bed in a and the filtrate was vacuum distilled to give the crystalline form I of olanzapine.

IT 132539-06-1, Olanzapine  
 RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

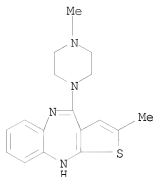
(process for preparing crystalline form I of olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-



(CA INDEX NAME)

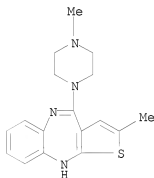


IT 402586-77-0

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (process for preparing crystalline form I of olanzapine)

RN 402586-77-0 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
 2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:1) (CA INDEX NAME)

● H<sub>2</sub>O

REFERENCE COUNT:

1

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

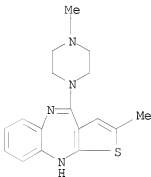
L27 ANSWER 36 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2006:548123 HCAPLUS  
 DOCUMENT NUMBER: 145:14805  
 TITLE: An improved process for the preparation of  
 polymorph form-I of olanzapine  
 INVENTOR(S): Giridhar, Thota; Reguri, Buchi Reddy; Chakka, Ramesh  
 PATENT ASSIGNEE(S): Dr. Reddy's Laboratories Limited, India  
 SOURCE: Indian, 15 pp.  
 CODEN: INXXAP  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 190857	A1	20030830	IN 2000-MA569	20000724
PRIORITY APPLN. INFO.:			IN 2000-MA569	20000724

AB The present invention is related to a method for the preparation of polymorph form-I of olanzapine by conversion of the Form II into the desired polymorph by using CH<sub>2</sub>Cl<sub>2</sub> as the solvent. Crude olanzapine was suspended in CH<sub>2</sub>Cl<sub>2</sub> to give a clear solution and the resultant solution was then treated with carbon followed by filtration. The product obtained on drying was the polymorph form-I of olanzapine.

IT 132539-06-1, Olanzapine  
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
 (improved process for preparation of polymorph form-I of olanzapine)

RN 132539-06-1 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

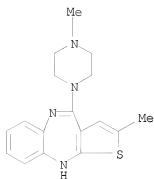


L27 ANSWER 37 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2006:496099 HCAPLUS  
 DOCUMENT NUMBER: 144:495403  
 TITLE: Injectable nanoparticulate olanzapine formulations  
 INVENTOR(S): Liversidge, Gary; Jenkins, Scott  
 PATENT ASSIGNEE(S): Elan Pharma International Ltd., Ire.  
 SOURCE: PCT Int. Appl., 58 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006055603	A2	20060526	WO 2005-US41470	20051116
WO 2006055603	A3	20061130		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
AU 2005307797	A1	20060526	AU 2005-307797	20051116
CA 2587710	A1	20060526	CA 2005-2587710	20051116
EP 1827374	A2	20070905	EP 2005-851701	20051116
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU			
CN 101106972	A	20080116	CN 2005-80046619	20051116
JP 2008520581	T	20080619	JP 2007-541454	20051116
BR 2005018187	A	20081104	BR 2005-18187	20051116
MX 2007005885	A	20080829	MX 2007-5885	20070515
ZA 2007003919	A	20080925	ZA 2007-3919	20070515
IN 2007KN01820	A	20070810	IN 2007-KN1820	20070522
KR 2007094898	A	20070927	KR 2007-713288	20070613
NO 2007003065	A	20070801	NO 2007-3065	20070615
PRIORITY APPLN. INFO.:			US 2004-628748P	P 20041116
			WO 2005-US41470	W 20051116
AB	Described are injectable formulations of nanoparticulate olanzapine that produce a prolonged duration of action upon administration, and methods of making and using such formulations. The injectable formulations comprise nanoparticulate olanzapine.			
IT	132539-06-1, Olanzapine			
	RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)			
	(injectable nanoparticulate olanzapine formulations)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-			

10/591,831

(CA INDEX NAME)



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 38 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:360573 HCAPLUS

DOCUMENT NUMBER: 144:494987

TITLE: Anisotropic lattice contraction in pharmaceuticals:  
the influence of cryo-crystallography on  
calculated powder diffraction patterns

AUTHOR(S): Stephenson, Gregory A.

CORPORATE SOURCE: Lilly Research Laboratories, Eli Lilly and Company,  
Indianapolis, IN, 46285, USASOURCE: Journal of Pharmaceutical Sciences (2006), 95(4),  
821-827

CODEN: JPMSAE; ISSN: 0022-3549

PUBLISHER: Wiley-Liss, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

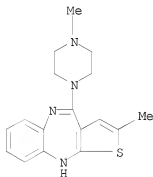
AB The following article examines the influence of thermal expansion on X-ray powder diffraction patterns. With the increasing percentages of structures that are being solved using low-temperature data sets and the nearly exclusive collection of room-temperature exptl. datasets by X-ray powder diffraction, considerable discrepancies are observed when comparing calculated power diffraction patterns to exptl. patterns. Such comparisons are extremely valuable to solid-state pharmaceutical scientists attempting to identify crystal forms of active pharmaceutical ingredients and excipient components of formulations. In this study, fluoxetine HCl, raloxifene HCl, and olanzapine are examined and serve as practical laboratory examples. The observations are supported through anal. of data presented in the Cambridge Structural Database to help assess the extent and potential impact of this problem.

IT 132539-06-1, Olanzapine

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(influence of cryo-crystallog. on calculated powder diffraction patterns)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 39 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:269740 HCAPLUS

DOCUMENT NUMBER: 144:299489

TITLE: Processes for the preparation of olanzapine

INVENTOR(S): Pandya, Bhargav R.; Aryan, Ram Chander; Kumar, Yatendra

PATENT ASSIGNEE(S): Ranbaxy Laboratories Limited, India

SOURCE: PCT Int. Appl., 14 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006030300	A2	20060323	WO 2005-IB2749	20050916
WO 2006030300	A3	20060601		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: IN 2004-DE1762 A 20040917  
 IN 2004-DE1765 A 20040917

AB The invention relates to processes for the preparation of a crystalline polymorphic form of olanzapine. More particularly, it relates to the preparation of a crystalline polymorphic form of olanzapine designated as Form X and to pharmaceutical compns. that include the polymorphic Form X. The invention also relates to a process for the preparation of a methanol solvate of olanzapine and a process for using such solvate.

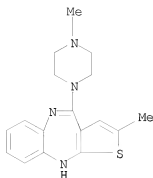
IT 132539-06-1, Olanzapine

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(processes for the preparation of olanzapine polymorphs)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)  
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 40 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:234837 HCAPLUS

DOCUMENT NUMBER: 144:299584

TITLE: A novel process for preparation of a pharmaceutically pure polymorphic Form I of olanzapine

INVENTOR(S): Muthukumaran, Ganesan; Veeramani, Kaliyappan; Mullaiyur, Radhakrishnan Selvaraju; Porchezhiyan, Vedapuri; Kanagasalam, Selvaraj; Nazir, Kassim Khan; Chanidran, T.

PATENT ASSIGNEE(S): Shasun Chemicals and Drugs Limited, India

SOURCE: PCT Int. Appl., 13 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

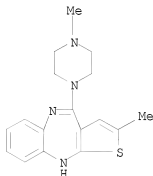
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006027800	A1	20060316	WO 2005-IN298	20050905
<p>W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW</p> <p>RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM</p>				
IN 2004CH00898	A	20070622	IN 2004-CH898	20040906
DE 112005000641	T5	20070906	DE 2005-112005000641	20050905
ES 2303462	A1	20080801	ES 2006-50063	20050905
ES 2303462	B1	20090605		
US 20080234479	A1	20080925	US 2006-568422	20061228
PRIORITY APPLN. INFO.:			IN 2004-CH898	A 20040906
			WO 2005-IN298	W 20050905

AB The invention is directed to a novel method for making crystalline Form I of olanzapine, wherein crude olanzapine is dissolved in a water-miscible solvent in which it is freely soluble, from which substantially pure polymorphic Form I of olanzapine is recovered by precipitation. For example, 35 kg of crude olanzapine was dissolved in 105 L of DMSO, maintained at 50° for 30 min, and the solution was then filtered to remove the insolubles. Addnl. 35 L of DMSO was charged into the reactor, and press the washings through filter into another reactor. The filtrate was cooled to 40°, 350 L methanol was added slowly while maintaining the temperature between 40 and 50°, followed by slow addition of 105 L of water while maintaining the temperature between 40 and 50° to precipitate olanzapine completely from the solution. The reaction mass was cooled to 0 to 5°, maintained for 3 h at the same temperature, filtered and then dried at 60 to 70° in a fluidized bed drier to obtain 25 kg of final product. The product was identified as substantially pure Form I of olanzapine by powder X-ray anal.



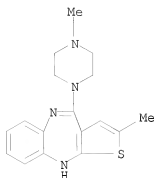
IT 132539-06-1, Olanzapine  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
 (preparation of pure polymorphic Form I of olanzapine)  
 RN 132539-06-1 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
 (1 CITINGS)  
 REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

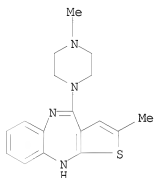
L27 ANSWER 41 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2006:215328 HCAPLUS  
 DOCUMENT NUMBER: 144:280623  
 TITLE: A process for the preparation of anhydrous  
 olanzapine hydrochloride of Form-1  
 INVENTOR(S): Alla, Venkat Reddy; Vyakaranam, Kameswara Rao;  
 Marella, Venugopala Reddy; Sirigiri, Aruna Kumari;  
 Bodapati, Sreenivasa Reddy; Billa, Ranadheer Reddy  
 PATENT ASSIGNEE(S): Lee Pharma Private Limited, India  
 SOURCE: PCT Int. Appl., 16 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006025065	A1	20060309	WO 2004-IN270	20040831
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
IN 2006CN01166	A	20060519	IN 2006-CN1166	20060405
PRIORITY APPLN. INFO.:			WO 2004-IN270	W 20040831
AB	Malononitrile is treated with propionaldehyde in the presence of sulfur powder and triethylamine in DMF to give 5-amino-4-cyano-2-methylthiophene. 2-Fluoronitrobenzene is condensed with 5-amino-4-cyano-2-methylthiophene in isopropanol and KOH powder give 4-cyano-2-methyl-1-(2-nitrophenylamino)thiophene. Reduction of the thiophene derivative with SnCl <sub>2</sub> and HCl in isopropanol followed by cyclization produces 4-amino-2-methyl-10H-thieno[2,3,-b][1,5]benzodiazepine. Condensation of the above thieno[2,3,-b][1,5]benzodiazepine derivative with N-methylpiperazine in DMSO and toluene gives olanzapine tech. grade in anhydrous form. Recrystn. of the tech. grade anhydrous olanzapine in CH <sub>2</sub> Cl <sub>2</sub> gives anhydrous olanzapine-HCl Form-I.			
IT	783334-36-1P RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (process for the preparation of anhydrous olanzapine hydrochloride of form-1)			
RN	783334-36-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, hydrochloride (1:1) (CA INDEX NAME)			



● HCl

IT 132539-06-1P, Olanzapine  
 RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);  
 BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);  
 USES (Uses)  
 (process for the preparation of anhydrous olanzapine hydrochloride of  
 form-1)  
 RN 132539-06-1 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 42 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:117133 HCAPLUS

DOCUMENT NUMBER: 144:198861

TITLE: Mixed solvate of olanzapine, method for preparing it and method for preparing form I of olanzapine therefrom

INVENTOR(S): Dalmases Barjoan, Pere; Bessa Bellmunt, Jordi

PATENT ASSIGNEE(S): Laboratorios Lesvi, S.L., Spain

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006013435	A1	20060209	WO 2005-IB2209	20050707
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
ES 2253091	A1	20060516	ES 2004-1850	20040727
ES 2253091	B1	20070201		
EP 1773841	A1	20070418	EP 2005-759149	20050707
EP 1773841	B1	20071205		
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU			
AT 380191	T	20071215	AT 2005-759149	20050707
JP 2008508254	T	20080321	JP 2007-523170	20050707
ES 2299049	T3	20080516	ES 2005-759149	20050707
ZA 2007000670	A	20080827	ZA 2007-670	20050707
US 20080280884	A1	20081113	US 2006-568021	20061017
IN 2006DN06347	A	20070831	IN 2006-DN6347	20061030
KR 2007063496	A	20070619	KR 2007-702091	20070126
PRIORITY APPLN. INFO.:			ES 2004-1850	A 20040727
			WO 2005-IB2209	W 20050707

AB Said mixed solvate is a solvate of olanzapine

/water/tetrahydrofuran in the proportion 1:1:1/2 (I). The method for preparing said solvate comprises treating a crude anhydrous olanzapine with a mixture of tetrahydrofuran/water. The method for preparing Form I of olanzapine includes desolvating the mixed solvate of formula I, by means of drying, in vacuo and under temperature-controlled conditions.

IT 875056-55-6P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)

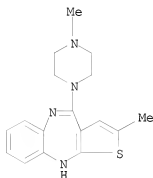
(mixed solvate of olanzapine and method for preparing form I of olanzapine therefrom)

10/591,831

RN 875056-55-6 HCAPLUS  
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, compd. with tetrahydrofuran, hydrate  
(2:1:4) (CA INDEX NAME)

CM 1

CRN 132539-06-1  
CMF C17 H20 N4 S

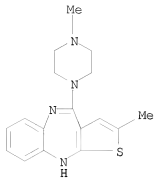


CM 2

CRN 109-99-9  
CMF C4 H8 O



IT 132539-06-1, Olanzapine  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(mixed solvate of olanzapine and method for preparing form I of  
olanzapine therefrom)  
RN 132539-06-1 HCAPLUS  
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)

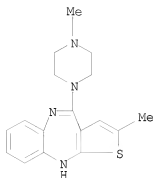


OS.CITING REF COUNT:	1	THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT:	6	THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 43 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2006:101681 HCAPLUS  
 DOCUMENT NUMBER: 144:177425  
 TITLE: Olanzapine salts and their conversion to  
 olanzapine free base  
 INVENTOR(S): Simonic, Igor; Lenarsic, Roman; Kotar-Jordan, Berta;  
 Zupet, Rok; Gnidovec, Joz  
 PATENT ASSIGNEE(S): Krka, Tovarna Zdravil, D.D., Novo Mesto, Slovenia  
 SOURCE: PCT Int. Appl., 29 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

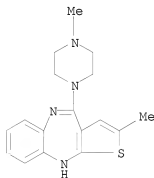
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006010620	A2	20060202	WO 2005-EP8218	20050728
WO 2006010620	A3	20060608		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM SI 21850 A 20060228 SI 2004-219 20040728 EP 1781665 A2 20070509 EP 2005-779020 20050728 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU PRIORITY APPLN. INFO.: SI 2004-219 A 20040728 WO 2005-EP8218 W 20050728				
AB	The present invention provides olanzapine salts useful as intermediates in the isolation of olanzapine from complex reaction mixts. These salts can be used for the production of olanzapine base which has a suitable purity for pharmaceutical use and can easily be converted to anhydrous olanzapine polymorphic form I, in high yields. Salts such as acetate, benzoate, dihydrochloride and solvates such as mixed water-isopropanol and dichloromethane were prepared			
IT	132539-06-1P, Olanzapine	783334-35-0P		
	861390-70-7P	861452-94-0P	869190-05-6P	
	874363-46-9P	874363-47-0P	874363-48-1P	
	RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (preparation of olanzapine form I from olanzapine salts)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)			

10/591,831



RN 783334-35-0 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrochloride (1:2) (CA INDEX NAME)



● 2 HCl

RN 861390-70-7 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, benzoate (1:1) (CA INDEX NAME)

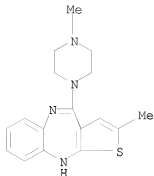
CM 1

CRN 132539-06-1

CMF C17 H20 N4 S



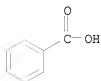
10/591,831



CM 2

CRN 65-85-0

CMF C7 H6 O2



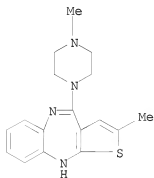
RN 861452-94-0 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, acetate (1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S



CM 2

10/591,831

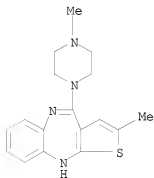
CRN 64-19-7  
CMF C2 H4 O2



RN 869190-05-6 HCAPLUS  
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, dichloromethane (1:?) (CA INDEX  
NAME)

CM 1

CRN 132539-06-1  
CMF C17 H20 N4 S



CM 2

CRN 75-09-2  
CMF C H2 Cl2

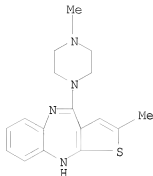


RN 874363-46-9 HCAPLUS  
CN 2-Propanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-  
b][1,5]benzodiazepine, hydrate (1:?:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1  
CMF C17 H20 N4 S

10/591,831



CM 2

CRN 67-63-0

CMF C3 H8 O



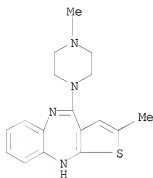
RN 874363-47-0 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, benzenesulfonate (1:?) (CA INDEX  
NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S



CM 2

CRN 98-11-3

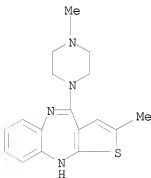
CMF C6 H6 O3 S



RN 874363-48-1 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
 2-methyl-4-(4-methyl-1-piperazinyl)-, perchlorate (1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1  
 CMF C17 H20 N4 S



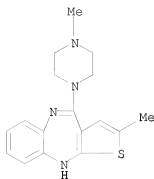
CM 2

CRN 7601-90-3  
 CMF C1 H O4



IT 783334-36-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation of olanzapine form I from olanzapine salts)  
 RN 783334-36-1 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
 2-methyl-4-(4-methyl-1-piperazinyl)-, hydrochloride (1:1) (CA INDEX NAME)

10/591,831

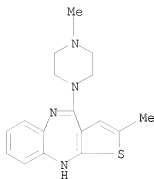


● HCl

OS.CITING REF COUNT:	3	THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT:	6	THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

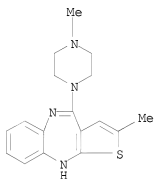
L27 ANSWER 44 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2006:54799 HCAPLUS  
 DOCUMENT NUMBER: 144:135287  
 TITLE: Improved process for making form I of olanzapine.  
 INVENTOR(S): Thakashinamoorthy, Chandiran; Krishnan, Devarajan; Govindaraju, Saravanan; Jothi, Shobana  
 PATENT ASSIGNEE(S): Shasun Chemicals and Drugs Limited, India  
 SOURCE: PCT Int. Appl., 18 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006006185	A1	20060119	WO 2005-IN239	20050713
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
IN 2004CH00678	A	20060602	IN 2004-CH678	20040714
EP 1781666	A1	20070509	EP 2005-783995	20050713
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
IN 2007CN00413	A	20070824	IN 2007-CN413	20070131
US 20080009481	A1	20080110	US 2007-572081	20070905
PRIORITY APPLN. INFO.:			IN 2004-CH678	A 20040714
			WO 2005-IN239	W 20050713
AB	This invention discloses a new dihydrate polymorph of Olanzapine (hereinafter referred to as "dihydrate C"), and a process for recovering anhydrous Form I of Olanzapine from this novel Dihydrate C.			
IT	205485-16-1P, Olanzapine dihydrate RL: PNU (Preparation, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (improved process for making form I of olanzapine.)			
RN	205485-16-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:2) (CA INDEX NAME)			



● 2 H<sub>2</sub>O

IT 132539-06-1, Olanzapine  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (improved process for making form I of olanzapine.)  
 RN 132539-06-1 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)

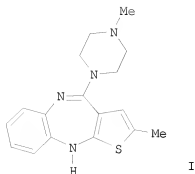


REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 45 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2006:54122 HCAPLUS  
 DOCUMENT NUMBER: 144:150401  
 TITLE: A process for the preparation of olanzapine  
 INVENTOR(S): Shastri, Jwalant Ashesh; Bhatnagar, Akshat; Thaper,  
 Rajesh Kumar; Dubey, Sushil Kumar  
 PATENT ASSIGNEE(S): Jubilant Organosys Ltd., India  
 SOURCE: PCT Int. Appl., 20 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006006180	A1	20060119	WO 2004-IN207	20040714
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
CA 2576862	A1	20060119	CA 2004-2576862	20040714
EP 1778649	A1	20070502	EP 2004-745138	20040714
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LI, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
WO 2007105225	A1	20070920	WO 2006-IN91	20060314
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
US 20090005556	A1	20090101	US 2008-632362	20080818
PRIORITY APPLN. INFO.: WO 2004-IN207			W 20040714	
OTHER SOURCE(S): CASREACT 144:150401				
GI				



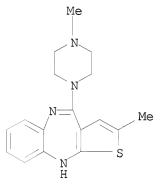


AB A process for the preparation of title compound I was disclosed. For example,  
 a solution of 2-(2-aminoanilino)-5-methylthiophene-3-carbonitrile (10.0 g), N-methylpiperazine (60 mL) and N-methylpiperazine hydrochloride (24 gm) was heated at 120 °C until the reaction was completed to afford after work olanzapine. Of note, 2-polymorphic forms of olanzapine were isolated.

IT 132539-06-1P, Olanzapine  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (polymorphic forms I, II; preparation of olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)

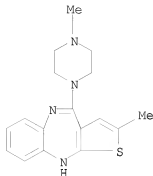


REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 46 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2005:1220824 HCAPLUS  
 DOCUMENT NUMBER: 143:466081  
 TITLE: Process for the preparation of olanzapine form-I  
 INVENTOR(S): Chava, Satyanarayana; Gorantla, Seeta Ramanjaneyulu; Abbineni, Jyothi Basu  
 PATENT ASSIGNEE(S): Matrix Laboratories Ltd., India  
 SOURCE: PCT Int. Appl., 17 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005107375	A2	20051117	WO 2005-IN98	20050404
WO 2005107375	A3	20060406		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
IN 2004CH00416		A	20060519	IN 2004-CH416
PRIORITY APPLN. INFO.:			IN 2004-CH416	A 20040506
AB	The present invention provides a reproducible, novel, com. feasible process to obtain olanzapine Form-I of substantial polymorphic purity with minimal number of steps using minimal number of solvents by condensation of 4-Aminomethyl-10H-thieno[2,3-b][1,5]benzodiazepine hydrochloride with N-Me piperazine followed by isolation of olanzapine methylene chloride solvate and conversion of the same to Olanzapine Form-I.			
IT	132539-06-1P, Olanzapine RL: PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (preparation of olanzapine polymorphism through olanzapine methylene chloride solvate)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)			

10/591,831

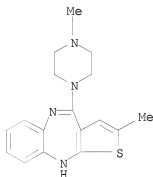


IT 869190-05-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation of olanzapine polymorphism through  
olanzapine methylene chloride solvate)  
RN 869190-05-6 HCAPLUS  
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, dichloromethane (1:?) (CA INDEX  
NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S



CM 2

CRN 75-09-2

CMF C H2 C12

C1-CH2-C1

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 47 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1042253 HCAPLUS

DOCUMENT NUMBER: 143:332562

TITLE: Synthesis of 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (olanzapine) and salts

INVENTOR(S): Mesar, Tomaz; Copar, Anton; Sturm, Hubert; Ludescher, Johannes

PATENT ASSIGNEE(S): Lek Pharmaceuticals D.D., Slovenia

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005090359	A2	20050929	WO 2005-EP2876	20050317
WO 2005090359	A3	20070426		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, AP, EA, EP, OA			
SI 21747	A	20051031	SI 2004-79	20040318
AU 2005223338	A1	20050929	AU 2005-223338	20050317
CA 2558654	A1	20050929	CA 2005-2558654	20050317
EP 1749010	A2	20070207	EP 2005-716177	20050317
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU			
BR 2005007584	A	20070703	BR 2005-7584	20050317
CN 101084222	A	20071205	CN 2005-80015935	20050317
IN 2006CN03389	A	20070615	IN 2006-CN3389	20060918
US 20080161557	A1	20080703	US 2006-598816	20061214
PRIORITY APPLN. INFO.:			SI 2004-79	A 20040318
			SI 2004-311	A 20041116
			WO 2005-EP2876	W 20050317

OTHER SOURCE(S): MARPAT 143:332562

AB The invention relates to a new process for the preparation of salts of olanzapine and transformation thereof into a pharmaceutically acceptable pure and discolored final product. The present invention also relates to new processes for the preparation of pure olanzapine. Thus, olanzapine was converted to its fumarate salt by reaction with fumaric acid in iso-ProH.

IT 777081-25-1P 861390-70-7P 865369-77-3P  
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of olanzapine and salts)

RN 777081-25-1 HCAPLUS

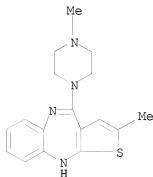
10/591,831

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, (2E)-2-butenedioate (9CI) (CA INDEX  
NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S



CM 2

CRN 110-17-8

CMF C4 H4 O4

Double bond geometry as shown.



RN 861390-70-7 HCAPLUS

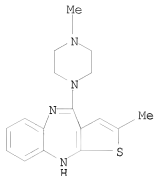
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, benzoate (1:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S

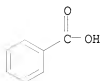
10/591,831



CM 2

CRN 65-85-0

CMF C7 H6 O2



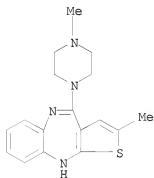
RN 865369-77-3 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, ethanedioate (1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S



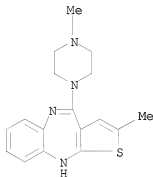
CM 2

10/591,831

CRN 144-62-7  
CMF C2 H2 O4



IT 132539-06-1P, Olanzapine  
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);  
BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);  
USES (Uses)  
(preparation of olanzapine and salts)  
RN 132539-06-1 HCAPLUS  
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)  
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 48 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2005:1004752 HCAPLUS  
 DOCUMENT NUMBER: 143:311947  
 TITLE: Isopropanol water solvate of olanzapine  
 INVENTOR(S): Kotar-Jordan, Berta; Lenarsic, Roman; Grcman, Marija;  
 Smrkolj, Matej; Meden, Anton; Simonic, Igor; Zupet,  
 Rok; Gnidovec, Joze; Benkic, Primož  
 PATENT ASSIGNEE(S): Krka, Tovarna Zdravil D.D. Novo Mesto, Slovenia  
 SOURCE: PCT Int. Appl., 34 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005085256	A1	20050915	WO 2005-EP2389	20050307
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
SI 21746	A	20051031	SI 2004-73	20040308
DE 102004060412	A1	20060706	DE 2004-102004060412	20041214
CA 2557986	A1	20050915	CA 2005-2557986	20050307
EP 1730153	A1	20061213	EP 2005-707723	20050307
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU			
NO 2006004484	A	20061129	NO 2006-4484	20061003
IN 2006CN03716	A	20070615	IN 2006-CN3716	20061009
US 20070191348	A1	20070816	US 2006-591831	20061023
PRIORITY APPLN. INFO.:			SI 2004-73	A 20040308
			DE 2004-102004060412A	20041214
			WO 2005-EP2389	W 20050307
AB	The invention relates to a novel and well defined solvate form of olanzapine which contains 2 mols. of water and 1 mol. of isopropanol per 2 mols. of olanzapine, and which can be converted into other, forms of olanzapine, in particular form I of olanzapine, as well as processes for preparing form I olanzapine.			
IT	864743-41-9P			
	RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (olanzapine solvate; prepn of isopropanol water solvates of olanzapine)			
RN	864743-41-9 HCAPLUS			
CN	2-Propanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine, hydrate (1:2:2) (CA INDEX NAME)			

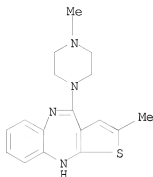


10/591,831

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S



CM 2

CRN 67-63-0

CMF C3 H8 O



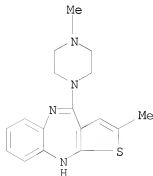
IT 132539-06-1, Olanzapine

RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(polymorphism; prepn of isopropanol water solvates of olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)



IT 132539-06-1DP, Olanzapine, methylene chloride

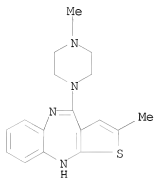
hemisolvate

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(prepn of isopropanol water solvates of olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)



RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological  
study); PREP (Preparation); USES (Uses)

(prepn of isopropanol water solvates of olanzapine)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 49 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2005:962265 HCAPLUS  
 DOCUMENT NUMBER: 143:235359  
 TITLE: Process for the preparation of olanzapine form 1 useful as antipsychotic drug  
 INVENTOR(S): Rammohan Rao, Davuluri; Dwivedi, Shriprakash Dhar; Sreenivasulu, Pamujula; Sasi Kiran, Surapaneni  
 PATENT ASSIGNEE(S): Neuland Laboratories Limited, India  
 SOURCE: PCT Int. Appl., 27 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

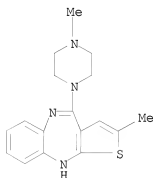
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005080401	A1	20050901	WO 2004-IN210	20040716
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
IN 2004CH00128	A	20060203	IN 2004-CH128	20040219
EP 1716154	A1	20061102	EP 2004-770670	20040716
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
US 20070072845	A1	20070329	US 2005-557650	20051118
PRIORITY APPLN. INFO.:			IN 2004-CH128	A 20040219
			WO 2004-IN210	W 20040716
AB	This invention provides an improved process for the preparation of Olanzapine Form (I). More specially, the invention provides in-situ improved process for the direct preparation of crystalline form of Olanzapine Form (I). The present invention also provides highly pure Olanzapine Form I with single individual impurity less than 0.1 % by HPLC. The process comprises: (1) refluxing a mixture of 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine hydrochloride, N-methylpiperazine, DMSO, and toluene at 110-130°, (2) cooling the reaction mixture to 20-90°, (3) adding water to the cooled mixture, (4) cooling the resulting mixture to (-10)-30°, (5) filtering the mixture, (6) slurrying the resulting wet cake with water at 50-90°, (7) filtering the material and sucking dry, (8) repeating the steps 6 to 7 till the traces of DMSO and its odor are removed, (9) dissolving the resulting wet cake in a chlorinated solvent at 25-30°, (10) separating the aqueous layer, (11) stirring the organic layer with anhydrous Na2SO4 or anhydrous MgSO4, (12) filtering and washing with CH2Cl2, (13) repeating the steps (11) and (12) till the moisture content is ≤ 0.1 %, and (14) purging dry ammonia gas in CH2Cl2 layer to get polymorphic form of Olanzapine form I. The process continues as follows; (15) removing the MgSO4 from the reaction mixture and washing the salts with			

CH<sub>2</sub>Cl<sub>2</sub>, (16) refluxing the CH<sub>2</sub>Cl<sub>2</sub> layer, (17) concentrating the reaction mixture under vacuum, (18) cooling the reaction mixture to a temperature, (19) stirring the material at 0-5°, (20) filtering the material and washing with chilled CH<sub>2</sub>Cl<sub>2</sub>, (21) air drying the material, and (22) vacuum drying the product at 60-70°.

IT 132539-06-1P, Olanzapine  
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of olanzapine form 1 useful as antipsychotic drug)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 50 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:901257 HCAPLUS

DOCUMENT NUMBER: 144:218913

TITLE: Thermal behaviour and stability in Olanzapine

AUTHOR(S): Polla, Griselda I.; Vega, Daniel R.; Lanza, Hilda; Tombari, Dora G.; Baggio, Ricardo; Ayala, Alejandro Pedro; Mendes Filho, Josue; Fernandez, Daniel; Leyva, Gabriela; Dartayet, Gustavo

CORPORATE SOURCE: Comision Nacional de Energia Atomica, Unidad de Actividad Fisica, Buenos Aires, 1650, Argent.

SOURCE: International Journal of Pharmaceutics (2005), 301(1-2), 33-40

CODEN: IJPHDE; ISSN: 0378-5173

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The stability and thermal behavior of two anhydrate phases and a new mixed water:DMSO solvate of Olanzapine (2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno-[2,3-b][1,5]benzodiazepine) are studied by different methods: differential scanning calorimetry (DSC), x-ray powder diffraction (XRPD) and Raman scattering (RS). Single crystal structural data for the latter phase are presented, confirming the presence of the (Olanzapine)<sub>2</sub> dimer as the structural building unit of all known phases of the drug, either anhydrate or solvated. An apparent interconversion between both solid state forms is shown to be an artifact and explained in terms of a melting-recrystn. process.

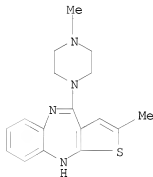
IT 132539-06-1, Olanzapine 875611-83-9

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(thermal behavior and stability in olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)



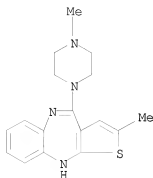
RN 875611-83-9 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, compd. with sulfinylbis[methane] (5:2), pentahydrate (9CI) (CA INDEX NAME)

CM 1

10/591,831

CRN 132539-06-1  
CMF C17 H20 N4 S



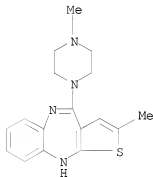
CM 2  
CRN 67-68-5  
CMF C2 H6 O S



OS.CITING REF COUNT:	6	THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT:	12	THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 51 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2005:813566 HCAPLUS  
 DOCUMENT NUMBER: 144:218907  
 TITLE: Olanzapine form 1  
 AUTHOR(S): Anon.  
 CORPORATE SOURCE: Spain  
 SOURCE: IP.com Journal (2005), 5(6A), 34 (No. IPCOM000125182D), 23 May 2005  
 CODEN: IJPOBX; ISSN: 1533-0001  
 PUBLISHER: IP.com, Inc.  
 DOCUMENT TYPE: Journal; Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IP 125182D		20050523	IP 2005-125182D	20050523
PRIORITY APPLN. INFO.:				
			IP 2005-125182D	20050523
AB An improved method for the preparation of olanzapine form I is described. The method is based on the reaction of the benzodiazepine of formula II with methylpiperazine (III). The reaction is described in aprotic solvent such as toluene, dimethylsulfoxide or DMF. The obtained product is not pure and a crystallization is required to achieve the desired quality and polymorphic form.				
IT 132539-06-1P, Olanzapine				
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses) (improved synthesis and purification of olanzapine form I)				
RN 132539-06-1 HCAPLUS				
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)				



IT 861452-94-0P  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)  
 (improved synthesis and purification of olanzapine form I)  
 RN 861452-94-0 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine,

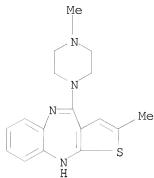
10/591,831

2-methyl-4-(4-methyl-1-piperazinyl)-, acetate (1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S



CM 2

CRN 64-19-7

CMF C2 H4 O2





L27 ANSWER 52 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:735332 HCAPLUS

DOCUMENT NUMBER: 143:199900

TITLE: Composition comprising salts or hydrates or polymorphs of idazoxan or its derivatives

INVENTOR(S): Bougaret, Joel; Avan, Jean-Louis; Segonds, Roland

PATENT ASSIGNEE(S): Pierre Fabre Medicament, Fr.

SOURCE: U.S. Pat. Appl. Publ., 26 pp., Cont.-in-part of U.S. Ser. No. 722,451.

CODEN: USXXCO

DOCUMENT TYPE: Patent

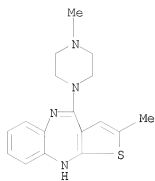
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

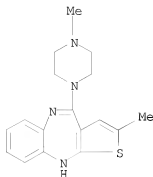
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050176798	A1	20050811	US 2004-974675	20041028
FR 2861299	A1	20050429	FR 2003-12626	20031028
FR 2861299	B1	20060127		
US 20050090537	A1	20050428	US 2003-722451	20031128
US 7338970	B2	20080304		
AU 2004285316	A1	20050512	AU 2004-285316	20041028
CA 2542752	A1	20050512	CA 2004-2542752	20041028
EP 1682124	A1	20060726	EP 2004-805330	20041028
EP 1682124	B1	20071219		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
CN 1870993	A	20061129	CN 2004-80031500	20041028
BR 2004016006	A	20070102	BR 2004-16006	20041028
JP 2007509911	T	20070419	JP 2006-537357	20041028
MX 2006004717	A	20060705	MX 2006-4717	20060427
HK 1094769	A1	20080328	HK 2007-100684	20070119
US 20080262067	A1	20081023	US 2008-103344	20080415
PRIORITY APPLN. INFO.:				
			FR 2003-12626	A 20031028
			US 2003-722451	A2 20031128
			US 2004-974675	A2 20041028
			WO 2004-FR2773	W 20041028
AB	The present invention discloses a pharmaceutical composition comprising idazoxan or derivs. and their therapeutically acceptable salts, racemates, optically active isomers and polymorphs. Thus, a tablet was prepared comprising idazoxan hydrochloride 20%, microcryst. cellulose 10%, glyceryl behenate 5%, colloidal silica 0.1% and lactose monohydrate to 100%. The addition of idazoxan to the treatment with fluphenazine in patients with schizophrenia to control extrapyramidal symptoms led to significant reduction in the symptoms in comparison with fluphenazine monotherapy.			
IT	132539-06-1, Olanzapine RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (in combination with; composition comprising salts or hydrates or polymorphs of idazoxan or its derivs.)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)			

10/591,831



L27 ANSWER 53 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2005:696917 HCAPLUS  
 DOCUMENT NUMBER: 143:179517  
 TITLE: A process for making olanzapine in a  
 polymorph form I  
 INVENTOR(S): Keltjens, Rolf  
 PATENT ASSIGNEE(S): Synthon B.V., Neth.  
 SOURCE: PCT Int. Appl., 25 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005070937	A1	20050804	WO 2005-EP834	20050126
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1720885	A1	20061115	EP 2005-701231	20050126
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR			
US 20050272720	A1	20051208	US 2005-50851	20050127
PRIORITY APPLN. INFO.:			US 2004-539120P	P 20040127
			US 2004-562225P	P 20040415
			US 2004-569607P	P 20040511
			WO 2005-EP834	W 20050126
AB	Heating a solid, preferably crystalline, olanzapine acetate produces olanzapine form I in high purity, free of other olanzapine forms and in good yields. The olanzapine acetate can also be used to purify raw or tech. grade olanzapine and to serve as an intermediary to other forms of olanzapine base. Olanzapine acetate was prepared by the reaction of olanzapine with acetic acid. Olanzapine acetate was stored at 65-70° for 18 h to obtain the olanzapine form I.			
IT	861387-16-8P RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (process for making olanzapine in polymorph form I)			
RN	861387-16-8 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, acetate (1:1) (CA INDEX NAME)			
CM	1			
CRN	132539-06-1			
CMF	C17 H20 N4 S			



CM 2

CRN 64-19-7

CMF C2 H4 O2



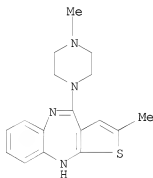
IT 132539-06-1P, Olanzapine

RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);  
 BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);  
 USES (Uses)

(process for making olanzapine in polymorph form I)

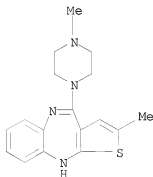
RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
 (2 CITINGS)  
 REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 54 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2005:687896 HCAPLUS  
 DOCUMENT NUMBER: 144:78318  
 TITLE: Olazipinium nicotinate  
 AUTHOR(S): Ravikumar, K.; Swamy, G. Y. S. K.; Sridhar, B.; Roopa, S.  
 CORPORATE SOURCE: Laboratory of X-ray Crystallography, Indian Institute of Chemical Technology, Hyderabad, 500 007, India  
 SOURCE: Acta Crystallographica, Section E: Structure Reports Online (2005), E61(8), o2720-o2723  
 CODEN: ACSEBH; ISSN: 1600-5368  
 URL: <http://journals.iucr.org/e/issues/2005/08/00/bt6703/index.html>  
 PUBLISHER: Blackwell Publishing Ltd.  
 DOCUMENT TYPE: Journal; (online computer file)  
 LANGUAGE: English  
 AB The crystal structure of the title compound, C<sub>17</sub>H<sub>21</sub>N<sub>4</sub>S·C<sub>6</sub>H<sub>4</sub>N<sub>2</sub>O<sub>2</sub>-, [systematic name: 1-methyl-4-(2-methyl-10H-thieno[2,3-b][1,5]benzodiazepin-4-yl)hexahydropyrazin-1-ium nicotinate] is reported. Crystallog. data are given. The central seven-membered heterocycle is in a boat conformation, while the piperazine ring displays a chair conformation with its Me group oriented equatorially. The coulombic interaction between olanzapinium and nicotinate ions is supplemented by intra- and intermol. N-H...O H bonds, forming infinite chains along the c axis.  
 IT 872042-73-4  
 RL: PRP (Properties)  
 (crystal structure of)  
 RN 872042-73-4 HCAPLUS  
 CN 3-Pyridinecarboxylic acid, compd. with  
 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine  
 (1:1) (CA INDEX NAME)  
 CM 1  
 CRN 132539-06-1  
 CMF C17 H20 N4 S



CM 2  
 CRN 59-67-6

10/591,831

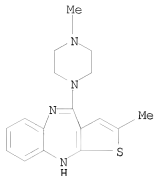
CMF C6 H5 N O2



OS.CITING REF COUNT:	3	THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT:	22	THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 55 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2005:638703 HCAPLUS  
 DOCUMENT NUMBER: 143:139194  
 TITLE: Buccal dosage forms for extended drug release  
 INVENTOR(S): Jain, Rajesh; Jindal, Kour Chand; Singh, Sukhjeet  
 PATENT ASSIGNEE(S): Panacea Biotech Ltd., India  
 SOURCE: PCT Int. Appl., 25 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005065640	A1	20050721	WO 2005-IN3	20050105
WO 2005065640	A8	20051208		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, SM			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
IN 2004DE00024	A	20060210	IN 2004-DE24	20040106
PRIORITY APPLN. INFO.:			IN 2004-DE24	A 20040106
			IN 2004-DE26	A 20040106
AB	Buccal dosage form compns., preferably of poorly bioavailable drug(s), or drug(s) which undergo extensive presystematic metabolism, are provided. The compns. provide extended release of the drug in the oral cavity, and are preferably in the taste masked form. A process of preparing of such compns. is also provided. Thus, a tablet contained sumatriptan succinate 25.0, Indion-204 75.0, maltodextrin 48.0, sucrose 30.0, CM-cellulose 18.0, HPMC 8.0, HPC 8.0, citric acid 15.0, NaCl 5.0, and Povidone 3.0 25 mg/tablet.			
IT	132539-06-1, Olanzapine			
	RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (buccal dosage forms for extended drug release)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)			



OS.CITING REF COUNT:	1	THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT:	5	THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



L27 ANSWER 56 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2005:369131 HCAPLUS  
 DOCUMENT NUMBER: 142:417199  
 TITLE: Pharmaceutical composition based on idazoxan, salts, hydrates or polymorphs  
 INVENTOR(S): Bougaret, Joel; Avan, Jean-Louis; Segonds, Roland  
 PATENT ASSIGNEE(S): Fr.  
 SOURCE: U.S. Pat. Appl. Publ., 22 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

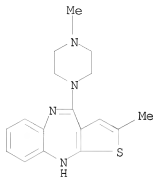
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050090537	A1	20050428	US 2003-722451	20031128
US 7338970	B2	20080304		
FR 2861299	A1	20050429	FR 2003-12626	20031028
FR 2861299	B1	20060127		
AU 2004285316	A1	20050512	AU 2004-285316	20041028
CA 2542752	A1	20050512	CA 2004-2542752	20041028
WO 2005041956	A1	20050512	WO 2004-FR2773	20041028
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 20050176798	A1	20050811	US 2004-974675	20041028
EP 1682124	A1	20060726	EP 2004-805330	20041028
EP 1682124	B1	20071219		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR			
CN 1870993	A	20061129	CN 2004-80031500	20041028
BR 2004016006	A	20070102	BR 2004-16006	20041028
JP 2007509911	T	20070419	JP 2006-537357	20041028
AT 381331	T	20080115	AT 2004-805330	20041028
ES 2297525	T3	20080501	ES 2004-805330	20041028
MX 2006004717	A	20060705	MX 2006-4717	20060427
HK 1094769	A1	20080328	HK 2007-100684	20070119
US 20080113022	A1	20080515	US 2008-15788	20080117
PRIORITY APPLN. INFO.:			FR 2003-12626	A 20031028
			US 2003-722451	A2 20031128
			WO 2004-FR2773	W 20041028
AB	A pharmaceutical composition comprises an idazoxan salt or idazoxan hydrate 5, microcryst. cellulose 10, lubricant 5, colloidal silica 0.1, and lactose monohydrate qs to 100%. Crystallog. anal. by powder x-ray diffraction was carried out on idazoxan polymorphs.			
IT	132539-06-1, Olanzapine RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical composition based on idazoxan or salts or hydrates or			

10/591,831

polymorphs)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)



REFERENCE COUNT:

10

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

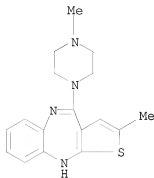
L27 ANSWER 57 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2004:927215 HCAPLUS  
 DOCUMENT NUMBER: 141:384322  
 TITLE: Preparation of polymorphic crystalline forms of the antipsychotic agent olanzapine dihydrochloride  
 INVENTOR(S): Petho, Janos; Barkoczy, Jozsef; Kotay Nagy, Peter; Simig, Gyula; Szent-Kirallyi, Zsuzsa  
 PATENT ASSIGNEE(S): Egis Gyogyszergyar Rt., Hung.  
 SOURCE: PCT Int. Appl., 59 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004094433	A1	20041104	WO 2004-HU42	20040422
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
HU 2003001082	A2	20041228	HU 2003-1082	20030422
HU 226410	B1	20081128		
AU 2004232544	A1	20041104	AU 2004-232544	20040422
CA 2522734	A1	20041104	CA 2004-2522734	20040422
EP 1620439	A1	20060201	EP 2004-728854	20040422
EP 1620439	B1	20080716		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
CN 1777613	A	20060524	CN 2004-80010665	20040422
CN 100471859	C	20090325		
JP 2006524219	T	20061026	JP 2006-506249	20040422
ZA 2005008936	A	20080730	ZA 2005-8936	20040422
AT 401332	T	20080815	AT 2004-728854	20040422
ES 2310728	T3	20090116	ES 2004-728854	20040422
CN 101468999	A	20090701	CN 2008-10125441	20040422
BG 109361	A	20060929	BG 2005-109361	20051122
US 20070004706	A1	20070104	US 2006-553908	20060911
PRIORITY APPLN. INFO.:			HU 2003-1082	A 20030422
			CN 2004-80010665	A3 20040422
			WO 2004-HU42	W 20040422
AB Polymorphic crystalline forms of the antipsychotic agent olanzapine dihydrochloride are presented.				
IT 783334-35-0P 783334-36-1P				
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of polymorphic crystalline forms of the antipsychotic agent olanzapine dihydrochloride)				

10/591,831

RN 783334-35-0 HCAPLUS

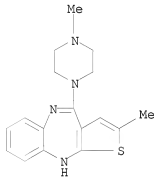
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrochloride (1:2) (CA INDEX NAME)



● 2 HCl

RN 783334-36-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrochloride (1:1) (CA INDEX NAME)



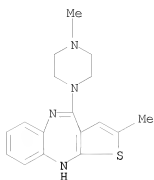
● HCl

IT 132539-06-1, Olanzapine

RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of polymorphic crystalline forms of the  
antipsychotic agent olanzapine dihydrochloride)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)



OS.CITING REF COUNT:	1	THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT:	3	THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 58 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:754425 HCAPLUS

DOCUMENT NUMBER: 141:282789

TITLE: Pharmaceutical cocrystals of active ingredients

INVENTOR(S): Almarsson, Oern; Bourghol Hickey, Magali; Peterson, Matthew; Moulton, Brian; Rodriguez-Hornedo, Nair  
PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA; University of South Florida; The Regents of the University of Michigan; Zaworotko, Michael J.

SOURCE: PCT Int. Appl., 561 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004078163	A2	20040916	WO 2004-US6288	20040226
WO 2004078163	A3	20050120		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NG, NH, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
WO 2003074474	A2	20030912	WO 2003-US6662	20030303
WO 2003074474	A3	20031218		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 20040019211	A1	20040129	US 2003-449307	20030530
US 7078526	B2	20060718		
WO 2004000284	A1	20031231	WO 2003-US19574	20030620
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 20050025791	A1	20050203	US 2003-601092	20030620
WO 2004078161	A1	20040916	WO 2003-US27772	20030904
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,			

	GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW		
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
US 20070026078	A1	20070201	US 2003-660202 20030911
WO 2004061433	A1	20040722	WO 2003-US41273 20031224
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW		
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
CA 2514733	A1	20040916	CA 2004-2514733 20040226
EP 1631260	A2	20060308	EP 2004-715190 20040226
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK		
JP 2007524596	T	20070830	JP 2006-508979 20040226
WO 2004089313	A2	20041021	WO 2004-US9947 20040331
WO 2004089313	A3	20051124	
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW		
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
US 20050070551	A1	20050331	US 2004-926842 20040826
US 7446107	B2	20081104	
WO 2005092884	A1	20051006	WO 2004-US28456 20040901
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW		
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
EP 1718640	A1	20061108	EP 2004-782868 20040901
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR		
JP 2007525502	T	20070906	JP 2007-500742 20040901
AU 2004270238	A1	20050317	AU 2004-270238 20040904

CA 2534664	A1	20050317	CA 2004-2534664	20040904
WO 2005023198	A2	20050317	WO 2004-US29013	20040904
WO 2005023198	A3	20050714		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1670753	A2	20060621	EP 2004-783308	20040904
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR			
BR 2004013777	A	20061107	BR 2004-13777	20040904
CN 1874993	A	20061206	CN 2004-80031982	20040904
JP 2007513867	T	20070531	JP 2006-525508	20040904
US 20060140985	A1	20060629	US 2005-541703	20050708
US 20070059356	A1	20070315	US 2005-546963	20050826
US 20060223794	A1	20061005	US 2005-551014	20050929
NO 2006000669	A	20060602	NO 2006-669	20060210
KR 2006128831	A	20061214	KR 2006-704425	20060303
US 20070021510	A1	20070125	US 2006-570405	20060303
US 7566805	B2	20090728		
US 20090088443	A1	20090402	US 2008-234420	20080919
PRIORITY APPLN. INFO.:			US 2003-451213P	P 20030228
			WO 2003-US6662	A 20030303
			US 2003-456027P	P 20030318
			US 2003-463962P	P 20030418
			US 2003-449307	A 20030530
			US 2003-601092	A 20030620
			WO 2003-US19574	A 20030620
			US 2003-487064P	P 20030711
			WO 2003-US27772	A 20030904
			US 2003-660202	A 20030911
			US 2003-508208P	P 20031002
			WO 2003-US41273	A 20031224
			US 2004-542752P	P 20040206
			US 2002-356764P	P 20020215
			US 2002-360768P	P 20020301
			US 2002-380288P	P 20020515
			US 2002-384152P	P 20020531
			US 2002-390881P	P 20020621
			US 2002-406974P	P 20020830
			US 2002-232589	A1 20020903
			US 2002-426275P	P 20021114
			US 2002-427086P	P 20021115
			US 2002-295995	A3 20021118
			US 2002-428515P	P 20021122
			US 2002-429515P	P 20021126
			US 2002-437516P	P 20021230
			US 2003-439282P	P 20030110
			US 2003-439283P	P 20030110
			US 2003-441335P	P 20030121



US	2003-444315P	P	20030131
US	2003-378956	A	20030303
US	2003-456608P	P	20030321
US	2003-459501P	P	20030401
WO	2003-US17184	A2	20030530
US	2003-486713P	P	20030711
US	2003-637829	A2	20030808
WO	2003-US28982	A2	20030916
US	2003-747742	A	20031229
US	2004-747742	A1	20031229
WO	2003-US41642	A	20031229
WO	2004-US400	W	20040108
WO	2004-US6288	W	20040226
US	2004-548343P	P	20040227
WO	2004-US9947	W	20040331
US	2004-560411P	P	20040406
US	2004-569036P	P	20040507
US	2004-573412P	P	20040521
US	2004-579176P	P	20040612
US	2004-581992P	P	20040622
US	2004-586752P	P	20040709
US	2004-588236P	P	20040715
US	2004-590590P	P	20040723
US	2004-926842	A	20040826
WO	2004-US28456	W	20040901
WO	2004-US29013	W	20040904

AB A pharmaceutical composition comprises a cocrystal of an active pharmaceutical ingredient (API) and a cocrystal former hydrogen bonded to each other, wherein the API has at least 1 functional group selected om, e.g., ether, thioether, alc., thiol, aldehyde, ketone, thioketone, ester, carboxylic acid, amine, ammonia, imine, thiocyanate, cyanamide, oxime, nitro, S-heterocyclic ring, N-heterocyclic ring, or pyrrole and the co-crystal former has at least 1 functional group selected om, e.g., amine, amide, pyridine, imidazole, indole, pyrrolidine, carbonyl, carboxyl, hydroxyl, phenol, or sulfone, such that the API and cocrystal former are capable of cocrystg. om a solution phase under crystallization conditions. The co-crystals have better solubility, dose response, dissoln., bioavailability, stability or hygroscopicity than the API. Thus, co-crystals of celecoxib and nicotinamide (1:1 molar ratio) were prepared by mixing the acetone solution of the 2 and allowing the solution to evaporate slowly overnight.

IT 756835-49-1P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(pharmaceutical cocrystals of active ingredients)

RN 756835-49-1 HCAPLUS

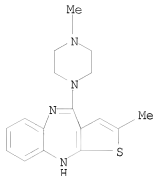
CN 3-Pyridinecarboxamide, compd. with  
2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine  
(1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1

CME C17 H20 N4 S

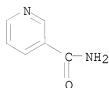
10/591,831



CM 2

CRN 98-92-0

CMF C6 H6 N2 O

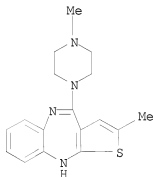


IT 132539-06-1, Olanzapine

RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)  
(pharmaceutical cocrystals of active ingredients)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)



OS.CITING REF COUNT: 5

THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD  
(6 CITINGS)

L27 ANSWER 59 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2004:754423 HCAPLUS  
 DOCUMENT NUMBER: 141:282787  
 TITLE: Pharmaceutical cocrystal compositions of drugs such as carbamazepine, celecoxib, and olanzapine  
 INVENTOR(S): Almarsson, Oern; Bourghol Hickey, Magali; Peterson, Matthew; Zaworotko, Michael J.; Moulton, Brian; Rodriguez-Hornedo, Nair  
 PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA; University of South Florida; The Regents of the University of Michigan  
 SOURCE: PCT Int. Appl., 489 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 18  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004078161	A1	20040916	WO 2003-US27772	20030904
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 20030224006	A1	20031204	US 2003-378956	20030303
CA 2513746	A1	20040916	CA 2003-2513746	20030904
AU 2003272270	A1	20040928	AU 2003-272270	20030904
EP 1608339	A1	20051228	EP 2003-754445	20030904
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
JP 2007507554	T	20070329	JP 2006-552403	20030904
US 20070026078	A1	20070201	US 2003-660202	20030911
CA 2511881	A1	20040722	CA 2003-2511881	20031224
WO 2004061433	A1	20040722	WO 2003-US41273	20031224
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003303591	A1	20040729	AU 2003-303591	20031224
EP 1579198	A1	20050928	EP 2003-808567	20031224
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
JP 2006517527	T	20060727	JP 2005-508617	20031224
US 20070015841	A1	20070118	US 2003-747742	20031229

CA 2514733	A1	20040916	CA 2004-2514733	20040226
WO 2004078163	A2	20040916	WO 2004-US6288	20040226
WO 2004078163	A3	20050120		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1631260	A2	20060308	EP 2004-715190	20040226
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
JP 2007524596	T	20070830	JP 2006-508979	20040226
WO 2004089313	A2	20041021	WO 2004-US9947	20040331
WO 2004089313	A3	20051124		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZM, ZW, BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 20050070551	A1	20050331	US 2004-926842	20040826
US 7446107	B2	20081104		
AU 2004270238	A1	20050317	AU 2004-270238	20040904
CA 2534664	A1	20050317	CA 2004-2534664	20040904
WO 2005023198	A2	20050317	WO 2004-US29013	20040904
WO 2005023198	A3	20050714		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZM, ZW, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1670753	A2	20060621	EP 2004-783308	20040904
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR			
BR 2004013777	A	20061107	BR 2004-13777	20040904
CN 1874993	A	20061206	CN 2004-80031982	20040904
JP 2007513867	T	20070531	JP 2006-525508	20040904
US 20060134198	A1	20060622	US 2005-541216	20050629
US 20060140985	A1	20060629	US 2005-541703	20050708
US 20070059356	A1	20070315	US 2005-546963	20050826
US 20060223794	A1	20061005	US 2005-551014	20050929
IN 2006KN00371	A	20070622	IN 2006-KN371	20060220
KR 2006128831	A	20061214	KR 2006-704425	20060303

US 20070021510	A1	20070125	US 2006-570405	20060303
US 7566805	B2	20090728		
US 20090088443	A1	20090402	US 2008-234420	20080919
PRIORITY APPLN. INFO.:			US 2003-451213P	P 20030228
			US 2003-378956	A 20030303
			US 2003-463962P	P 20030418
			US 2003-487064P	P 20030711
			US 2002-356764P	P 20020215
			US 2002-360768P	P 20020301
			US 2002-380288P	P 20020515
			US 2002-384152P	P 20020531
			US 2002-390881P	P 20020621
			US 2002-406974P	P 20020830
			US 2002-232589	A1 20020903
			US 2002-426275P	P 20021114
			US 2002-427086P	P 20021115
			US 2002-295995	A3 20021118
			US 2002-428515P	P 20021122
			US 2002-429515P	P 20021126
			US 2002-437516P	P 20021230
			US 2003-439282P	P 20030110
			US 2003-439283P	P 20030110
			US 2003-441335P	P 20030121
			US 2003-444315P	P 20030131
			WO 2003-US6662	A 20030303
			US 2003-456027P	P 20030318
			US 2003-456608P	P 20030321
			US 2003-459501P	P 20030401
			US 2003-449307	A2 20030530
			WO 2003-US17184	A2 20030530
			US 2003-601092	A2 20030620
			WO 2003-US19574	A 20030620
			US 2003-486713P	P 20030711
			US 2003-637829	A2 20030808
			WO 2003-US27772	W 20030904
			US 2003-660202	A 20030911
			WO 2003-US28982	A 20030916
			US 2003-508208P	P 20031002
			WO 2003-US41273	W 20031224
			US 2003-747742	A 20031229
			US 2004-747742	A1 20031229
			WO 2003-US41642	A 20031229
			WO 2004-US400	W 20040108
			US 2004-542752P	P 20040206
			WO 2004-US6288	W 20040226
			US 2004-548343P	P 20040227
			WO 2004-US9947	W 20040331
			US 2004-560411P	P 20040406
			US 2004-573412P	P 20040521
			US 2004-579176P	P 20040612
			US 2004-581992P	P 20040622
			US 2004-586752P	P 20040709
			US 2004-588236P	P 20040715
			US 2004-590590P	P 20040723
			US 2004-926842	A3 20040826
			WO 2004-US29013	W 20040904

AB A pharmaceutical composition comprising a cocrystal of an active pharmaceutical

ingredient (API) and a cocrystal forming compound wherein the API has at least 1 functional group selected from, e.g., ether, thioether, alc., thiol, aldehyde, ketone, thioetone, nitrate ester, phosphate ester, thiophosphate ester, ester, thioester, amine, secondary amine, ammonia, imidazole, or pyridine and the co-crystal forming compound has at least 1 functional group selected from e.g., amine, amide, pyridine, imidazole, indole, pyrrolidine, carbonyl, carboxyl, hydroxyl, phenol, or sulfone,, such that the API and cocrystal forming compound are capable of

co-crystallizing

from a solution phase under crystallization conditions. Thus, carbamazepine

and

p-phthalaldehyde were dissolved in MeOH and slow evaporation of the solvent gave 1:1 carbamazepine-p-phthalaldehyde cocrystals. The cocrystals were characterized by powder x-ray diffraction, DSC and IR spectrometry.

IT 756835-49-1P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(pharmaceutical cocrystal compns. of drugs such as carbamazepine and celecoxib and olanzapine)

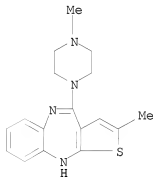
RN 756835-49-1 HCAPLUS

CN 3-Pyridinecarboxamide, compd. with  
2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine  
(1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1

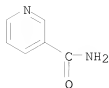
CMF C17 H20 N4 S



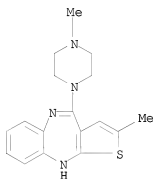
CM 2

CRN 98-92-0

CMF C6 H6 N2 O



IT 132539-06-1, Olanzapine  
 RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT  
 (Reactant or reagent); USES (Uses)  
 (pharmaceutical cocrystal compns. of drugs such as carbamazepine and  
 celecoxib and olanzapine)  
 RN 132539-06-1 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD  
 (12 CITINGS)  
 REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 60 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:589401 HCAPLUS  
 DOCUMENT NUMBER: 141:128859  
 TITLE: Pharmaceutical propylene glycol solvate compositions  
 INVENTOR(S): Tawa, Mark; Almarsson, Oern; Remenar, Julius  
 PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA  
 SOURCE: PCT Int. Appl., 317 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 18  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004060347	A2	20040722	WO 2003-US41642	20031229
WO 2004060347	A3	20041104		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VZ, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 6559293	B1	20030506	US 2002-232589	20020903
WO 2004000284	A1	20031231	WO 2003-US19574	20030620
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 20050025791	A1	20050203	US 2003-601092	20030620
WO 2004026235	A2	20040401	WO 2003-US28982	20030916
WO 2004026235	A3	20040805		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
WO 2004061433	A1	20040722	WO 2003-US41273	20031224
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VZ, VN, YU, ZA, ZM, ZW			



	NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW	
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
AU 2003300452	A1	20040729 AU 2003-300452 20031229
WO 2004089313	A2	20041021 WO 2004-US9947 20040331
WO 2004089313	A3	20051124
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW	
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
US 20060140985	A1	20060629 US 2005-541703 20050708
US 20060223794	A1	20061005 US 2005-551014 20050929
PRIORITY APPLN. INFO.:		US 2002-232589 A 20020903
		US 2002-437516P P 20021230
		US 2003-441335P P 20030121
		US 2003-456027P P 20030318
		US 2003-456608P P 20030321
		US 2003-459501P P 20030401
		US 2003-601092 A 20030620
		WO 2003-US19574 A 20030620
		US 2003-486713P P 20030711
		WO 2003-US28982 A 20030916
		WO 2003-US41273 A 20031224
		US 2002-356764P P 20020215
		US 2002-360768P P 20020301
		US 2002-380288P P 20020515
		US 2002-384152P P 20020531
		US 2002-390881P P 20020621
		US 2002-406974P P 20020830
		US 2002-412459P P 20020920
		US 2002-426275P P 20021114
		US 2002-427086P P 20021115
		US 2002-295995 A3 20021118
		US 2002-428515P P 20021122
		US 2002-429515P P 20021126
		US 2003-439282P P 20030110
		US 2003-439283P P 20030110
		US 2003-444315P P 20030131
		US 2003-451213P P 20030228
		US 2003-378956 A 20030303
		US 2003-463962P P 20030418
		US 2003-449307 A 20030530
		US 2003-487064P P 20030711
		US 2003-637829 A 20030808
		WO 2003-US27772 A2 20030904
		US 2003-660202 A2 20030911
		US 2003-747742 A 20031229

US 2004-747742	A1 20031229
WO 2003-US41642	W 20031229
WO 2004-US400	W 20040108
WO 2004-US6288	A 20040226
US 2004-548343P	P 20040227
WO 2004-US9947	W 20040331

AB The invention relates to pharmaceutical compns. comprising propylene glycol solvates of active pharmaceutical ingredients (APIs) which are hygroscopic or has low aqueous solubility. The composition comprises solvate characterized by (i) the mole ratio of propylene glycol to API in the range of 0.25 to 2; (ii) a crystalline form, (iii) a powder X-ray diffraction spectrum which differs from the corresponding powder X-ray diffraction spectrum of the unsolvated API by at least one property, (iv) stability to temps. of up to 50° under a stream of gas in a thermogravimetric anal. apparatus, (v) the API is optionally in the form of a metal salt, such as an alkali or an alkaline earth metal salt, (vi) the API has low aqueous solubility and

is selected from steroid drugs, and (vii) the composition further comprises a pharmaceutically-acceptable diluent, excipient or carrier. A method for preparing a propylene glycol solvate of an API comprises (a) contacting propylene glycol with an API in solution, (b) crystallizing a propylene glycol solvate of the API from the solution, and (c) isolating the solvate. For example, to a solution of celecoxib (253 mg, 0.664 mmol) in di-Et ether (6 mL) was added propylene glycol (0.075 mL, 102 mmol). To the clear solution was added potassium t-butoxide in THF (1 M, 0.66 mL, 0.66 mmol). Crystals immediately began to form and after 5 min the solid had completely crystallized. The crystalline salt form was found to be a 1:1 propylene glycol solvate of celecoxib potassium salt.

IT 724433-99-2P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and compns. of propylene glycol solvates with hygroscopic or low soluble drugs)

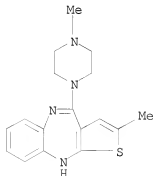
RN 724433-99-2 HCAPLUS

CN 1,2-Propanediol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S

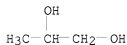


10/591,831

CM 2

CRN 57-55-6

CMF C3 H8 O2



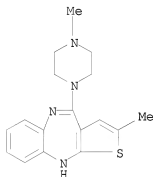
IT 132539-06-1, Olanzapine

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation and compns. of propylene glycol solvates with hygroscopic or low soluble drugs)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)



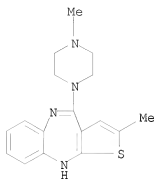
OS.CITING REF COUNT: 1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L27 ANSWER 61 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2004:566619 HCAPLUS  
 DOCUMENT NUMBER: 141:128822  
 TITLE: Methods for the preparation of olanzapine  
 hydrate and solvate crystal forms  
 INVENTOR(S): Dolitzky, Ben Zion; Aronhime, Judith; Diller, Dov  
 PATENT ASSIGNEE(S): Teva Pharmaceutical Industries Ltd., Israel; Teva  
 Pharmaceuticals USA, Inc.  
 SOURCE: PCT Int. Appl., 36 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004058773	A1	20040715	WO 2003-US41123	20031224
WO 2004058773	A9	20040819		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003300324	A1	20040722	AU 2003-300324	20031224
US 20040198721	A1	20041007	US 2003-746698	20031224
US 7323459	B2	20080129		
EP 1575962	A1	20050921	EP 2003-814357	20031224
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
US 20070129352	A1	20070607	US 2007-649441	20070103
PRIORITY APPLN. INFO.:			US 2002-435913P	P 20021224
			US 2003-746698	A1 20031224
			WO 2003-US41123	W 20031224
AB	A series of novel crystalline olanzapine forms are prepared and described, in particular hydrated (e.g., olanzapine dihydrate) and solvated crystalline forms of olanzapine (e.g., olanzapine isobutanol solvate).			
IT	205485-16-1P	Olanzapine dihydrate		
	722455-81-4P	722455-82-5P	722455-83-6P	
	722455-84-7P			
RL:	PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (methods for the preparation of olanzapine hydrate and solvate crystal forms)			
RN	205485-16-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:2) (CA INDEX NAME)			

10/591,831



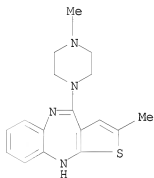
● 2 H<sub>2</sub>O

RN 722455-81-4 HCAPLUS  
CN 1-Propanol, 2-methyl-, compd. with  
2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine  
(1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1

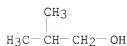
CMF C17 H20 N4 S



CM 2

CRN 78-83-1

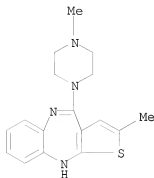
CMF C4 H10 O



10/591,831

RN 722455-82-5 HCAPLUS

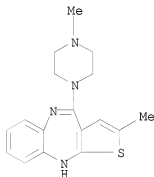
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (2:3) (CA INDEX NAME)



● 3/2 H<sub>2</sub>O

RN 722455-83-6 HCAPLUS

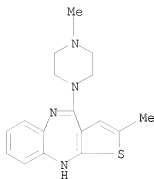
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:3) (CA INDEX NAME)



● 3 H<sub>2</sub>O

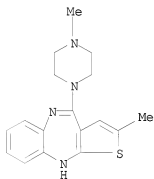
RN 722455-84-7 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (4:3) (CA INDEX NAME)



● 3/4 H<sub>2</sub>O

IT 132539-06-1, Olanzapine  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (methods for the preparation of olanzapine hydrate and solvate  
 crystal forms)  
 RN 132539-06-1 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
 (4 CITINGS)  
 REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 62 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:546512 HCAPLUS

DOCUMENT NUMBER: 141:111569

TITLE: A process for the preparation of a pharmaceutically pure polymorphic form of olanzapine

INVENTOR(S): Majka, Zbigniew; Stawinski, Tomasz

PATENT ASSIGNEE(S): Adamed Sp. z O.O., Pol.

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004056833	A1	20040708	WO 2003-IB5931	20031215
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2506663	A1	20040708	CA 2003-2506663	20031215
AU 2003292452	A1	20040714	AU 2003-292452	20031215
EP 1581537	A1	20051005	EP 2003-768031	20031215
EP 1581537	B1	20071121		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003017594	A	20051122	BR 2003-17594	20031215
CN 1729195	A	20060201	CN 2003-80106963	20031215
CN 100354280	C	20071212		
ES 2294333	T3	20080401	ES 2003-768031	20031215
NO 2005003368	A	20050711	NO 2005-3368	20050711
PRIORITY APPLN. INFO.:			PL 2002-357928	A 20021220
			WO 2003-IB5931	W 20031215

AB A process for the preparation of pharmaceutically pure polymorphic form I of olanzapine comprises crystallization of olanzapine from a solution in methylene chloride, wherein before the crystallization, the solution of olanzapine in methylene chloride is treated with silica gel, preferably at reflux temperature. Also disclosed is the form I of olanzapine substantially free of a chloromethyl analog, impurity of olanzapine as well as a process for removing the impurity from the polymorphic form I. Thus, 400 g olanzapine was treated with 300 mL methylene chloride and silica gel was added to the solution and the mixture heated. After cooling to 0°, the olanzapine was filtered off and shown to be 99.92% pure.

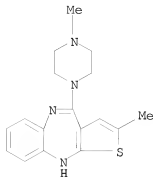
IT 132539-06-1P, Olanzapine  
 RL: PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (process for preparation of pharmaceutically pure polymorphic form of olanzapine)



10/591,831

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 63 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2004:203552 HCAPLUS  
 DOCUMENT NUMBER: 140:253583  
 TITLE: Process of preparation of olanzapine form I  
 INVENTOR(S): Patel, Hiren V.; Ray, Anup K.; Patel, Pramod B.;  
 Patel, Mahendra R.  
 PATENT ASSIGNEE(S): Sandoz, Inc., USA  
 SOURCE: U.S. Pat. Appl. Publ., 8 pp., Cont.-in-part of U.S.  
 Ser. No. 160,958.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040048854	A1	20040311	US 2003-449643	20030530
US 7297789	B2	20071120		
US 20080188465	A1	20080807	US 2007-928791	20071030
PRIORITY APPLN. INFO.:			US 2002-160958	A2 20020531
			US 2003-449643	A1 20030530

OTHER SOURCE(S): CASREACT 140:253583

AB Disclosed is a process for the preparation of polymorph form I of 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (olanzapine) by reacting (a) reacting 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine hydrochloride and 1-methylpiperazine in an aprotic high boiling solvent or mixts. thereof at a temperature of between about 90 to 130°; (b) purifying the product of step (a) in an acidic medium; (c) basifying the product of step (b) to a pH of between 7.5-9; and (d) extracting the product of step (c) using a low boiling organic solvent. Olanzapine is known as an antipsychotic agent and polymorph form I is in pharmaceutical formulations.

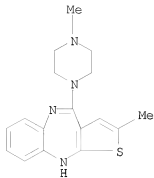
IT 132539-06-1P, Olanzapine  
 RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(process of preparation of olanzapine polymorph form I by reacting 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine hydrochloride and 1-methylpiperazine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)

10/591,831



OS.CITING REF COUNT: 2

THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

L27 ANSWER 64 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:60321 HCAPLUS

DOCUMENT NUMBER: 140:117363

TITLE: Preparation of polymorphic forms of olanzapine from its solvates

INVENTOR(S): Kotar, Jordan Berta; Vrecer, Franc; Grcman, Marija

PATENT ASSIGNEE(S): Krka, D.D. Novo Mesto, Slovenia

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004006933	A2	20040122	WO 2003-SI24	20030714
WO 2004006933	A3	20040401		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
SI 21270	A	20040229	SI 2002-175	20020715
CA 2493370	A1	20040122	CA 2003-2493370	20030714
AU 2003256242	A1	20040202	AU 2003-256242	20030714
EP 1551414	A2	20050713	EP 2003-764287	20030714
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
US 20060040920	A1	20060223	US 2005-521646	20050113
NO 2005000720	A	20050210	NO 2005-720	20050210
IN 2005CN00184	A	20070330	IN 2005-CN184	20050214
PRIORITY APPLN. INFO.:			SI 2002-175	A 20020715
			WO 2003-SI24	W 20030714

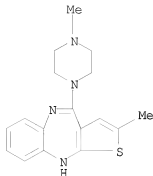
AB The invention relates to a process for the preparation of form I of olanzapine, crystallized from a solvent mixture which comprises 2-propanol, some pseudopolymorphic forms, namely solvates of olanzapine, a new polymorphic form A of olanzapine, and processes for the preparation thereof. For example, form A of olanzapine was prepared by suspending 10.0g olanzapine in 30 mL acetonitrile, adding 35mL methylene chloride in heated suspension, and drying under vacuum at 60°C.

IT 132539-06-1, Olanzapine

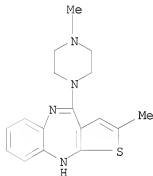
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(polymorphism; preparation of polymorphic forms of olanzapine from its solvates)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



IT 647825-99-8 647826-00-4 647826-01-5  
 647826-02-6 647826-03-7 647826-04-8  
 RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation,  
 nonpreparative)  
 (preparation of polymorphic forms of olanzapine from its  
 solvates)  
 RN 647825-99-8 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
 2-methyl-4-(4-methyl-1-piperazinyl)-, compd. with acetonitrile and  
 dichloromethane, hydrate (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 132539-06-1  
 CMF C17 H20 N4 S



CM 2  
 CRN 75-09-2  
 CMF C H2 C12

C1-CH2-C1

10/591,831

CM 3

CRN 75-05-8

CMF C2 H3 N

$\text{H}_3\text{C}-\text{C}\equiv\text{N}$

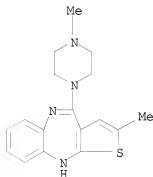
RN 647826-00-4 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, acetonitrile, hydrate (2:1:4) (CA  
INDEX NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S



CM 2

CRN 75-05-8

CMF C2 H3 N

$\text{H}_3\text{C}-\text{C}\equiv\text{N}$

RN 647826-01-5 HCAPLUS

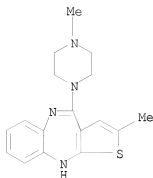
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, compd. with acetonitrile and  
dichloromethane (6:3:1), hexahydrate (9CI) (CA INDEX NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S

10/591,831



CM 2  
CRN 75-09-2  
CMF C H2 Cl2



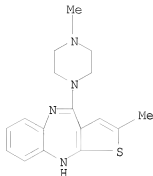
CM 3  
CRN 75-05-8  
CMF C2 H3 N



RN 647826-02-6 HCAPLUS  
CN 2-Propanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:2) (CA INDEX NAME)

CM 1  
CRN 132539-06-1  
CMF Cl7 H20 N4 S

10/591,831



CM 2

CRN 67-63-0

CMF C3 H8 O



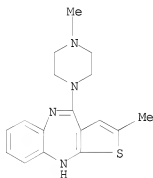
RN 647826-03-7 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, dichloromethane (2:1) (CA INDEX  
NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S



CM 2

CRN 75-09-2

CMF C H2 C12



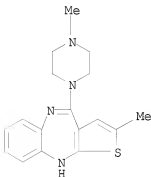
10/591,831

Cl-CH<sub>2</sub>-Cl

RN 647826-04-8 HCAPLUS  
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, dichloromethane (6:1) (CA INDEX  
NAME)

CM 1

CRN 132539-06-1  
CMF C17 H20 N4 S



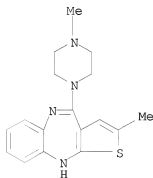
CM 2

CRN 75-09-2  
CMF C H2 Cl2

Cl-CH<sub>2</sub>-Cl

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD  
(5 CITINGS)  
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 65 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2003:1002481 HCAPLUS  
 DOCUMENT NUMBER: 140:278676  
 TITLE: 2-Methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine methanol solvate  
 AUTHOR(S): Wawrzycka-Gorczyca, Irena; Mazur, Liliana; Koziol, Anna E.  
 CORPORATE SOURCE: Faculty of Chemistry, Maria Curie-Skłodowska University, Lublin, 20031, Pol.  
 SOURCE: Acta Crystallographica, Section E: Structure Reports Online (2004), E60(1), o69-o71  
 CODEN: ACSEBH; ISSN: 1600-5368  
 PUBLISHER: International Union of Crystallography  
 DOCUMENT TYPE: Journal; (online computer file)  
 LANGUAGE: English  
 AB The title compound, C<sub>17</sub>H<sub>20</sub>N<sub>4</sub>S·CH<sub>4</sub>O, is an olanzapine 1:1 MeOH solvate. Crystallog. data are given. A pair of olanzapine mols. forms a centrosym. dimer with intermol. C-H... $\pi$  interactions. Intermol. host-host N-H...N H bonds were not found. The guest mol. is linked to host mols. through O-H...N, N-H...O and C-H...O H bonds.  
 IT 182808-49-7  
 RL: PRP (Properties)  
 (crystal structure of)  
 RN 182808-49-7 HCAPLUS  
 CN Methanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:1) (CA INDEX NAME)  
 CM 1  
 CRN 132539-06-1  
 CMF C17 H20 N4 S



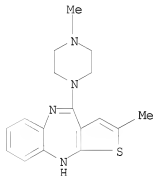
CM 2  
 CRN 67-56-1  
 CMF C H4 O

H<sub>3</sub>C-OH

10/591,831

OS.CITING REF COUNT:	4	THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
REFERENCE COUNT:	13	THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 66 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2003:1002480 HCAPLUS  
 DOCUMENT NUMBER: 140:278675  
 TITLE: Polymorphic form II of  
 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine  
 AUTHOR(S): Wawrzycka-Gorczyca, Irena; Koziol, Anna E.; Glice, Magdalena; Cybulski, Jacek  
 CORPORATE SOURCE: Faculty of Chemistry, Maria Curie-Sklodowska University, Lublin, 20031, Pol.  
 SOURCE: Acta Crystallographica, Section E: Structure Reports Online (2004), E60(1), o66-o68  
 CODEN: ACSEBH; ISSN: 1600-5368  
 PUBLISHER: International Union of Crystallography  
 DOCUMENT TYPE: Journal; (online computer file)  
 LANGUAGE: English  
 AB The title compound, C<sub>17</sub>H<sub>20</sub>N<sub>4</sub>S, generic name olanzapine, is an antipsychotic agent. Crystallog. data are given. The mol. consists of three fused rings (benzene, diazepine and thiophene) and an N-methylpiperazine substituent. The boat conformation of the central 1,5-diazepine ring defines the overall shape of the mol. Two butterfly-like mols. form centrosym. dimers stabilized by C-H... $\pi$  interactions between their cavities. The dimers are connected by intermol. N-H...N, C-H...N and C-H...S H bonds.  
 IT 132539-06-1, Olanzapine  
 RL: PRP (Properties)  
 (crystal structure of polymorph of)  
 RN 132539-06-1 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)

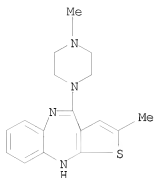


OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD  
 (5 CITINGS)  
 REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 67 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2003:991519 HCAPLUS  
 DOCUMENT NUMBER: 140:42213  
 TITLE: Preparation of the antipsychotic agent  
 2-ethyl-10-(4-methyl-1-piperazinyl)-4H-thieno[2,3-b][1,5]benzodiazepine  
 INVENTOR(S): Browder, Monte R.  
 PATENT ASSIGNEE(S): Ivax Corporation, USA  
 SOURCE: PCT Int. Appl., 26 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003104239	A1	20031218	WO 2003-US17550	20030603
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003239967	A1	20031222	AU 2003-239967	20030603
US 20040063694	A1	20040401	US 2003-453082	20030603
PRIORITY APPLN. INFO.:			US 2002-386126P	P 20020605
			WO 2003-US17550	W 20030603
AB	2-Ethyl-10-(4-methyl-1-piperazinyl)-4H-thieno[2,3-b][1,5]benzodiazepine, (I; m.p. 203-206°) prepared by reacting 2-amino-3-cyano-5-ethylthiophene with 2-fluoronitrobenzene followed by reaction of the intermediate with N-methylpiperazine, and its use in the treatment of CNS disorders including schizophrenia and bipolar disorders, is described; a I X-ray diffraction pattern and I-containing pharmaceutical formulations are presented. I may also be combined with other active ingredients, including HMG CoA reductase inhibitors such as lovastatin or simvastatin, and/or antidepressants such as fluoxetine or other SSRIs, to form medically useful combination products useful in treating psychotic conditions and depression while also preventing any rise beyond the normal range of cholesterol levels in any subset of patients that might develop such a condition.			
IT	132539-06-1, Olanzapine RL: MOA (Modifier or additive use); USES (Uses) (preparation of the antipsychotic agent 2-ethyl-10-(4-methyl-1-piperazinyl)-4H-thieno[2,3-b][1,5]benzodiazepine in formulation with)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)			

10/591,831



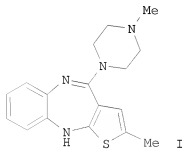
REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 68 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2003:972083 HCAPLUS  
 DOCUMENT NUMBER: 140:16753  
 TITLE: Process of preparation of olanzapine form I  
 INVENTOR(S): Patel, Hiren V.; Ray, Anup K.; Patel, Pramod B.;  
 Patel, Mahendra R.  
 PATENT ASSIGNEE(S): Geneva Pharmaceuticals, Inc., USA  
 SOURCE: PCT Int. Appl., 16 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003101997	A1	20031211	WO 2003-US17186	20030530
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003237305	A1	20031219	AU 2003-237305	20030530
EP 1513846	A1	20050316	EP 2003-736771	20030530
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
PRIORITY APPLN. INFO.:			US 2002-160958	A 20020531
			WO 2003-US17186	W 20030530
OTHER SOURCE(S):	CASREACT 140:16753			
GI				

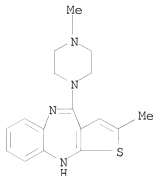


AB The title compound (I), an antipsychotic agent, was prepared from 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine hydrochloride and 1-methylpiperazine. A crystallization method yielded the polymorphic form I in 99.96% HPLC purity.  
 IT 132539-06-1P, Olanzapine

RL: IMF (Industrial manufacture); PUR (Purification or recovery); SPN  
(Synthetic preparation); PREP (Preparation)  
(preparation of olanzapine form I)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)



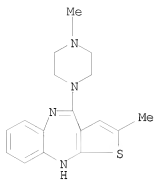
OS.CITING REF COUNT:	6	THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT:	3	THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



L27 ANSWER 69 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2003:950850 HCAPLUS  
 DOCUMENT NUMBER: 140:19846  
 TITLE: Pharmacologically active salts  
 INVENTOR(S): Larsen, Claus Selch  
 PATENT ASSIGNEE(S): Danmarks Farmaceutiske Universitet, Den.  
 SOURCE: PCT Int. Appl., 40 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003099293	A1	20031204	WO 2003-DK343	20030522
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, IJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003227517	A1	20031212	AU 2003-227517	20030522
PRIORITY APPLN. INFO.:			DK 2002-798	A 20020523
			WO 2003-DK343	W 20030522
AB	Novel salts formed between 2 active drug substances, wherein the first drug substance is an NSAID drug substance containing a carboxylic acid group and the second drug substance contains an amine group and is a local anesthetic or selected from the group consisting of nonopioid analgesics, antipsychotics, antidepressants, narcotic antagonists and local anesthetics. Such salts that are poorly soluble in tissue fluids are feasible for injectable prolonged release formulations, where the NSAID addnl. to minimize pain and tissue reaction at the site of administration. Thus, a salt was prepared by the reaction of the free base, bupivacaine with diflunil in acetone. The solubility and dissoln. profiles of the salt were determined			
IT	132539-06-1, Olanzapine RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of pharmacol. active salts)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)			

10/591,831



REFERENCE COUNT:

9

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 70 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:931370 HCAPLUS

DOCUMENT NUMBER: 139:399740

TITLE: Methods for preparation of olanzapine  
polymorphic form iINVENTOR(S): Piechaczek, Janina; Glice, Magdalena; Fraczek,  
Urszula; Serafin, Jadwiga; Szelejewski, Wieslaw;  
Soltysiak, Krzysztof

PATENT ASSIGNEE(S): Institut Farmaceutyczny, Pol.

SOURCE: PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003097650	A1	20031127	WO 2003-PL44	20030516
W: AT, AU, BA, BG, BR, BY, CA, CH, CN, CZ, EE, ES, FI, GB, HR, HU, IL, IN, JP, KP, KR, KZ, LT, LU, LV, MD, MK, MX, NO, NZ, PL, PT, RO, RU, SE, SK, TR, UA, US, UZ, YU, ZA				
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
PL 196814	B1	20080229	PL 2002-353989	20020517
AU 2003251247	A1	20031202	AU 2003-251247	20030516
EP 1509531	A1	20050302	EP 2003-752952	20030516
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, TR, BG, CZ, EE, HU, SK				
US 20050239772	A1	20051027	US 2005-514520	20050620
US 7538213	B2	20090526		
PRIORITY APPLN. INFO.:			PL 2002-353989	A 20020517
			WO 2003-PL44	W 20030516

AB The invention relates to the methods for preparation of olanzapine polymorphic Form I. The invention also relates to the new mixed solvates of olanzapine constituting valuable intermediates used in the preparation of substantially pure olanzapine polymorphic Form I.

IT 132539-06-1P, Olanzapine

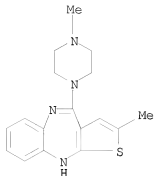
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(methods for preparation of olanzapine polymorphic form

i)

RN 132539-06-1 HCAPLUS

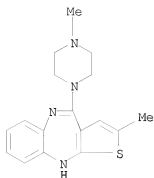
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



OS.CITING REF COUNT:	8	THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
REFERENCE COUNT:	7	THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

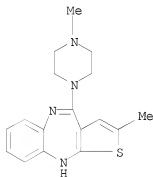
L27 ANSWER 71 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2003:875295 HCAPLUS  
 DOCUMENT NUMBER: 139:354500  
 TITLE: Novel crystalline polymorph form  
 VI of olanzapine and a process for its  
 preparation  
 INVENTOR(S): Reguri, Buchi Reddy; Chakka, Ramesh  
 PATENT ASSIGNEE(S): Reddy's Laboratories Limited, India; Cord, Janet I.  
 SOURCE: PCT Int. Appl., 21 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003091260	A1	20031106	WO 2003-US12414	20030422
WO 2003091260	A9	20040603		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
IN 2002MA00311	A	20050304	IN 2002-MA311	20020423
AU 2003243153	A1	20031110	AU 2003-243153	20030422
US 20050153954	A1	20050714	US 2004-509473	20040929
PRIORITY APPLN. INFO.:			IN 2002-MA311	A 20020423
			WO 2003-US12414	W 20030422
AB	A novel crystalline form of 2-methyl-4-(4-methyl-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (olanzapine), which has a defined X-ray diffraction pattern, is prepared and to its preparation by dissolving olanzapine in a C1-6 alkanol at 0-40° for 30 min to 10 h, isolating the product, and drying it at 40-100°. The olanzapine crystal polymorph is useful for the treatment of CNS disorders (no data).			
IT	132539-06-1, Olanzapine RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (novel crystalline polymorph form VI of olanzapine and a process for its preparation)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)			



OS.CITING REF COUNT:	2	THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT:	4	THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

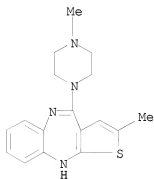
L27 ANSWER 72 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2003:681542 HCAPLUS  
 DOCUMENT NUMBER: 140:10936  
 TITLE: 2-Methyl-4-(4-methylpiperazin-1-yl)-10H-thieno[2,3-b][1,5]benzodiazepine methanol solvate monohydrate  
 AUTHOR(S): Capuano, Ben; Crosby, Ian T.; Fallon, Gary D.; Lloyd, Edward J.; Yuriev, Elizabeth; Egan, Simon J.  
 CORPORATE SOURCE: Victorian College of Pharmacy, Department of Medicinal Chemistry, Monash University (Parkville Campus), Victoria, 3052, Australia  
 SOURCE: Acta Crystallographica, Section E: Structure Reports Online (2003), E59(9), o1367-o1369  
 CODEN: ACSEBH; ISSN: 1600-5368  
 PUBLISHER: International Union of Crystallography  
 DOCUMENT TYPE: Journal; (online computer file)  
 LANGUAGE: English  
 AB The thienobenzodiazepine nucleus of the title compound, olanzapine MeOH solvate monohydrate, C<sub>17</sub>H<sub>20</sub>N<sub>4</sub>S·CH<sub>4</sub>O·H<sub>2</sub>O, is buckled, with the central seven-membered heterocycle in a boat conformation and the dihedral angle between the planes of the aromatic rings being 118°. The piperazine ring displays an almost perfect chair conformation with the Me group assuming an equatorial orientation. The relative position of the thienobenzodiazepine and piperazine ring system is controlled by the planarity of the piperazine N in the amidine moiety. Crystallog. data are given.  
 IT 628722-44-1  
 RL: PRP (Properties)  
 (crystal structure of)  
 RN 628722-44-1 HCAPLUS  
 CN Methanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine, hydrate (1:1:1) (CA INDEX NAME)  
 CM 1  
 CRN 132539-06-1  
 CMF C17 H20 N4 S



CM 2  
 CRN 67-56-1  
 CMF C H4 O

H<sub>3</sub>C--OH

IT 132539-06-1  
 RL: PRP (Properties)  
 (mol. structure of)  
 RN 132539-06-1 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
 (3 CITINGS)  
 REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



L27 ANSWER 73 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:657203 HCAPLUS

DOCUMENT NUMBER: 140:70035

TITLE: Pharmacogenetic and pharmacogenomic research in psychiatry: current advances and clinical applications

AUTHOR(S): Arranz, Maria J.; Mancama, Dalu T.; Kerwin, Robert W.

CORPORATE SOURCE: Clinical Neuropharmacology, Institute of Psychiatry, KCL, London, SE5 8AF, UK

SOURCE: Current Pharmacogenomics (2003), 1(3), 151-158

CODEN: CPUHAC; ISSN: 1570-1603

PUBLISHER: Bentham Science Publishers Ltd.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. After more than 50 yr of investigations, pharmacogenetic efforts have crystallized in several findings relating genetically determined pharmacokinetic and pharmacodynamic factors to treatment response. Metabolic enzymes and neurotransmitter proteins contain genetic polymorphisms that alter their interaction with psychotropic drugs and contribute to response variability. This knowledge can be used to predict clin. results and adverse reactions. Current clin. applications include rapid methods for the characterization of metabolic status that is used in clin. trials for the identification of individuals susceptible to side-effects. This practice is being extended to clin. labs. to avoid toxic reactions to specific treatments. Pharmacogenetics methods for the pre-treatment prediction of clin. response to the antipsychotic drugs clozapine, risperidone, olanzapine and haloperidol are in development and expected to be available for clin. use in the next decade. However, much is still expected from the wealth of information produced by pharmacogenomic research. Pharmacogenomic strategies, including large scale functional studies in brain areas related to the etiol. of mental disorders, will increase the knowledge on therapeutic mechanisms and identify novel targets. Pharmacogenomic advances will be translated into more specific and safer drugs and tailoring of drug prescription according to the patient's genetic susceptibilities. Pharmacogenetic and pharmacogenomic investigations have the potential to transform psychiatric treatment in the next decades.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 99 THERE ARE 99 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 74 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2003:512084 HCAPLUS  
 DOCUMENT NUMBER: 139:74001  
 TITLE: Preparation of crystalline form I of  
 olanzapine  
 INVENTOR(S): Chhabada, Vijay Chhangamal; Rehani, Rajeev Budhdev;  
 Thennati, Rajamamannar  
 PATENT ASSIGNEE(S): Sun Pharmaceutical Industries Limited, India  
 SOURCE: U.S. Pat. Appl. Publ., 6 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20030125322	A1	20030703	US 2002-326397	20021223
US 6906062	B2	20050614		
CA 2471341	A1	20030710	CA 2002-2471341	20021223
WO 2003055438	A2	20030710	WO 2002-IN241	20021223
WO 2003055438	A3	20030814		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002367119	A1	20030715	AU 2002-367119	20021223
EP 1470130	A2	20041027	EP 2002-805871	20021223
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2005513144	T	20050512	JP 2003-556017	20021223
CH 695862	A5	20060929	CH 2002-2198	20021223
BE 1015037	A6	20040803	BE 2002-744	20021224
PRIORITY APPLN. INFO.:				
			IN 2001-MU1211	A 20011224
			WO 2002-IN241	W 20021223

AB Crystalline Form I of olanzapine is characterized by x-ray powder diffraction IR absorbance bands. The compound has a stable color at ambient conditions of storage and its preparation comprises at least 2 repetitive steps of crystallization from 1 or more organic solvents by dissolving olanzapine in the solvent and allowing crystal to occur. In at least 1 step the solution is purified by treating with a solid adsorbent material and filtering, and in the last step the crystalline material is subjected to drying. Olanzapine along with 0.75 L of absolute ethanol is stirred at 30°. The contents of the flask are gradually heated to 77-78° to obtain a clear solution and then stirred for 15 mins at 77-78°. Gradually it was allowed to cool to 55-57°. During the process of cooling to 55-57° the solution is seeded with olanzapine Form I at an interval of every 5° until the seed remains undissolved. The contents are further cooled to 30-34° and then to 10°. The solid product is filtered and washed with chilled absolute alc. and sucked dry. The product is

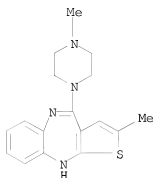
dried under vacuum at 47-50° until constant weight to obtain 33 g (yield 66% weight/weight) of Form 1.

IT 132539-06-1P, Olanzapine

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PUR (Purification or recovery); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (preparation of crystalline form I of olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 75 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:501679 HCAPLUS

DOCUMENT NUMBER: 139:299379

TITLE: Anhydrides and Hydrates of Olanzapine:  
Crystallization, Solid-State Characterization,  
and Structural RelationshipsAUTHOR(S): Reutzel-Edens, Susan M.; Bush, Julie K.; Magee, Paula  
A.; Stephenson, Greg A.; Byrn, Stephen R.

CORPORATE SOURCE: Eli Lilly and Company, Indianapolis, IN, 46285, USA

SOURCE: Crystal Growth &amp; Design (2003), 3(6), 897-907

CODEN: CGDEFU; ISSN: 1528-7483

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Olanzapine, a novel benzodiazepine agent used in the treatment of schizophrenia and related psychoses, crystallizes in 25+ crystal forms, seven of which are pharmaceutically relevant: three anhydrides (I-III), three dihydrates (B, D, and E), and a higher hydrate. X-ray crystal structures of the thermodynamically stable anhydrous form (I), two dihydrates (B and D), a higher hydrate, and a Rietveld-refined structure of dihydrate E have permitted a detailed anal. of the conformational, H bonding, and crystal packing preferences of olanzapine. Crystallog. data are given. The symmetry and H-bonding interactions in the crystal forms also were characterized by <sup>13</sup>C and <sup>15</sup>N CP/MAS NMR spectroscopy. Using the crystallog. and spectroscopic data, significant structural relations were identified between the crystal forms of olanzapine. The present study demonstrates the utility of integrating crystallog., spectroscopy, and crystal modeling in detailed structural studies of polymorphism (and solvate formation) and for rationalizing crystallization outcomes. Also polymorphism and hydrate formation can be used to optimize the phys. presentation of pharmaceutical solids.

IT 132539-06-1, Olanzapine 205485-16-1,

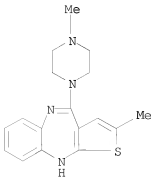
Olanzapine dihydrate 585571-52-4,

Olanzapine hydrate (2:5)

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)

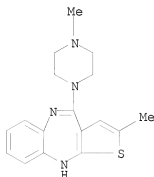
(crystallization and crystal structure of)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)

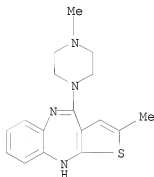
10/591,831

RN 205485-16-1 HCAPLUS  
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:2) (CA INDEX NAME)



● 2 H<sub>2</sub>O

RN 585571-52-4 HCAPLUS  
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (2:5) (CA INDEX NAME)



● 5/2 H<sub>2</sub>O

OS.CITING REF COUNT:	24	THERE ARE 24 CAPLUS RECORDS THAT CITE THIS RECORD (24 CITINGS)
REFERENCE COUNT:	50	THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 76 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:356454 HCAPLUS

DOCUMENT NUMBER: 138:358414

TITLE: Olanzapine dihydrate II

preparation and use for treating CNS disorders

INVENTOR(S): Cord, Janet I.; Reddy, Reguri Buchi; Ramesh, Chakka

PATENT ASSIGNEE(S): Dr. Reddy's Laboratories Ltd., India

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

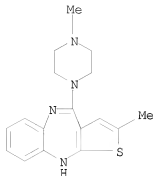
LANGUAGE:

English

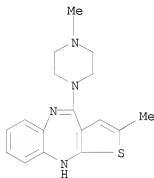
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003037903	A1	20030508	WO 2002-US34701	20021029
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
IN 2001MA00877	A	20050304	IN 2001-MA877	20011029
CA 2464306	A1	20030508	CA 2002-2464306	20021029
AU 2002340328	A1	20030512	AU 2002-340328	20021029
EP 1440074	A1	20040728	EP 2002-778677	20021029
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
PRIORITY APPLN. INFO.:			IN 2001-MA877	A 20011029
			WO 2002-US34701	W 20021029
AB	The present invention relates to novel dihydrate form of olanzapine (referred to as Olanzapine dihydrate -II), a process for its preparation and its conversation to Olanzapine Form-II. Olanzapine dihydrate II can be used for treating disorders of the central nervous system.			
IT	132539-06-1, Olanzapine RL: FMU (Formation, unclassified); PRP (Properties); THU (Therapeutic use); BiOL (Biological study); FORM (Formation, nonpreparative); USES (Uses) (olanzapine dihydrate II preparation and use for treating CNS disorders)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)			



IT 205485-16-1P, 10H-Thieno[2,3-b][1,5]benzodiazepine,  
 2-methyl-4-(4-methyl-1-piperazinyl)-, dihydrate  
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);  
 BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (olanzapine dihydrate II preparation and use for  
 treating CNS disorders)  
 RN 205485-16-1 HCAPLUS  
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
 2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:2) (CA INDEX NAME)



● 2 H<sub>2</sub>O

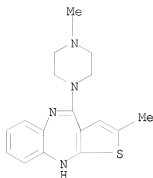
OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD  
 (5 CITINGS)  
 REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 77 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2002:850326 HCAPLUS  
 DOCUMENT NUMBER: 137:329496  
 TITLE: Pharmaceutical compositions containing new  
 polymorphic forms of olanzapine and  
 uses thereof  
 INVENTOR(S): Hamied, Yusuf K.; Kankan, Rajendra N.; Rao, Dharmaraj  
 R.  
 PATENT ASSIGNEE(S): India  
 SOURCE: U.S. Pat. Appl. Publ., 16 pp., Cont.-in-part of U. S.  
 6,348,458.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 20020165225	A1	20021107	US 2001-26949	20011227		
US 7022698	B2	20060404				
IN 187439	A1	20020427	IN 1999-BO977	19991228		
IN 1999BO00972	A	20050304	IN 1999-BO972	19991228		
US 6348458	B1	20020219	US 2000-540749	20000331		
ZA 2002005228	A	20030630	ZA 2002-5228	20020628		
PRIORITY APPLN. INFO.:			IN 1999-BO972	A 19991228		
			IN 1999-BO977	A 19991228		
			US 2000-540749	A2 20000331		
			WO 2000-GB4982	A 20001222		
AB	Pharmaceutical compns. containing form III, form IV, form V olanzapine and/or pharmaceutically acceptable salts thereof. The pharmaceutical compns. are useful for the treatment of psychotic conditions, mild anxiety and gastrointestinal conditions. In particular, the compns. are useful for treating schizophrenia and related disorders, acute mania, bipolar I disorder, psychotic mood disorder and psychosis in patients with Alzheimer's disease.					
IT	132539-06-1, Olanzapine	132539-06-1D,				
	Olanzapine, salts					
RL:	THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. containing new polymorphic forms of olanzapine and uses thereof)					
RN	132539-06-1 HCAPLUS					
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)					

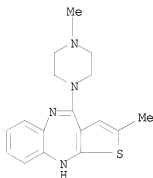


10/591,831



RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)

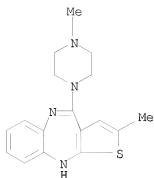


OS.CITING REF COUNT: 2

THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

L27 ANSWER 78 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2002:594852 HCAPLUS  
 DOCUMENT NUMBER: 137:145611  
 TITLE: Crystal forms of olanzapine  
 INVENTOR(S): Davies, Julian; Gano, James Edward  
 PATENT ASSIGNEE(S): Geneva Pharmaceuticals, Inc., USA  
 SOURCE: PCT Int. Appl., 10 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002060906	A2	20020808	WO 2001-US0627	20011220
WO 2002060906	A3	20030123		
WO 2002060906	A8	20040129		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002248268	A1	20020812	AU 2002-248268	20011220
PRIORITY APPLN. INFO.:			US 2001-259261P	P 20010104
			WO 2001-US0627	W 20011220
AB	A novel crystal form of the drug, olanzapine, processes for its preparation and its pharmaceutical uses are disclosed. Olanzapine was dissolved in acetone-water solution and the solvent was concentrated After filtration, the precipitate composed of yellow crystals was dried and the m.p. was 189-190°.			
IT	132539-06-1, Olanzapine RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (crystal forms of olanzapine)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)			



OS.CITING REF COUNT:	3	THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT:	2	THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 79 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:505442 HCAPLUS

DOCUMENT NUMBER: 137:63269

TITLE: Process for the preparation of a new crystal modification of the antipsychotic olanzapine by crystallization from an aqueous aliphatic lower ketone solvent

INVENTOR(S): Davies, Julian; Gano, James Edward

PATENT ASSIGNEE(S): Geneva Pharmaceuticals, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 5 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020086993	A1	20020704	US 2001-24934	20011219
US 6740753	B2	20040525		

PRIORITY APPLN. INFO.: US 2001-259621P P 20010104

AB A novel crystal modification of the antipsychotic olanzapine, having a specified X-ray diffraction pattern and a m.p. in the range of 189-190°, is prepared by crystallizing olanzapine from an aqueous crystallization solution of a lower aliphatic ketone (e.g., acetone).

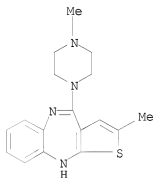
IT 132539-06-1, Olanzapine

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)

(process for the preparation of a new crystal modification of the antipsychotic olanzapine by crystallization from an aqueous aliphatic lower ketone solvent)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L27 ANSWER 80 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:171904 HCAPLUS

DOCUMENT NUMBER: 136:221739

TITLE: Process for preparation of hydrates of

olanzapine and their conversion into

crystalline forms of olanzapine

INVENTOR(S): Koprowski, Robert; Reguri, Buchi Reddy; Chakka, Ramesh

PATENT ASSIGNEE(S): Reddy's Laboratories Ltd., India

SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002018390	A1	20020307	WO 2001-US7258	20010307
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
IN 190895	A1	20030830	IN 2000-MA711	20000831
IN 191714	A1	20031220	IN 2000-MA709	20000831
CA 2420987	A1	20020307	CA 2001-2420987	20010307
AU 2001043475	A	20020313	AU 2001-43475	20010307
EP 1313742	A1	20030528	EP 2001-916449	20010307
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001014031	A	20030909	BR 2001-14031	20010307
HU 2003000875	A2	20031229	HU 2003-875	20010307
HU 2003000875	A3	20050928		
JP 2004507548	T	20040311	JP 2002-523905	20010307
NO 2003000926	A	20030424	NO 2003-926	20030227
ZA 2003001640	A	20040203	ZA 2003-1640	20030227
MX 2003001827	A	20041101	MX 2003-1827	20030228
US 20040067936	A1	20040408	US 2003-363436	20031120
PRIORITY APPLN. INFO.:			IN 2000-MA709	A 20000831
			IN 2000-MA711	A 20000831
			WO 2001-US7258	W 20010307

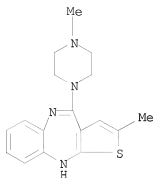
AB The present invention relates to a method for the preparation of hydrates of olanzapine. The present invention also relates to a process for conversion of these hydrates into a pure crystalline form of olanzapine referred to as form-1. The present invention also relates to a method of converting olanzapine form-2 to form-1. Thus, a mixture of 4-amino-2-methyl-10H-thieno-[2,3-b][1,5]benzodiazepine-HCl, N-methylpiperazine, DMSO, and toluene was heated under reflux, the mixture was cooled, and water was added. The olanzapine that was separated was dried to give a product with a moisture content of 5.22%.

IT 132539-06-1P, Olanzapine 402586-77-0P  
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of hydrates of olanzapine and their conversion into crystalline forms of olanzapine)

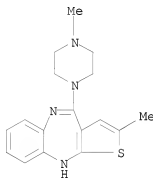
RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)



RN 402586-77-0 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:1) (CA INDEX NAME)



● H<sub>2</sub>O

IT 205485-16-1

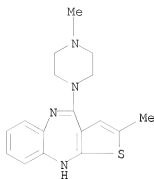
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)

(preparation of hydrates of olanzapine and their conversion into crystalline forms of olanzapine)

RN 205485-16-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:2) (CA INDEX NAME)

10/591,831



● 2 H<sub>2</sub>O

OS.CITING REF COUNT:	12	THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
REFERENCE COUNT:	3	THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 81 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2002:136045 HCAPLUS  
 DOCUMENT NUMBER: 136:172816  
 TITLE: Polymorphic forms of olanzapine  
 INVENTOR(S): Hamied, Yusuf K.; Kankan, Rajendra N.; Rao, Dharmaraj R.  
 PATENT ASSIGNEE(S): U & I Pharmaceuticals Ltd., USA  
 SOURCE: U.S., 20 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6348458	B1	20020219	US 2000-540749	20000331
IN 187439	A1	20020427	IN 1999-B0977	19991228
IN 1999B000972	A	20050304	IN 1999-B0972	19991228
CA 2395774	A1	20010705	CA 2000-2395774	20001222
WO 2001047933	A1	20010705	WO 2000-GB4982	20001222
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 2001020176	A	20010709	AU 2001-20176	20001222
AU 779452	B2	20050127		
EP 1246827	A1	20021009	EP 2000-983422	20001222
EP 1246827	B1	20050413		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
DE 20023184	U1	20030508	DE 2000-20023184	20001222
NZ 519926	A	20040227	NZ 2000-519926	20001222
NZ 528520	A	20040827	NZ 2000-528520	20001222
AT 293113	T	20050415	AT 2000-983422	20001222
ES 2240215	T3	20051016	ES 2000-983422	20001222
US 20020165225	A1	20021107	US 2001-26949	20011227
US 7022698	B2	20060404		
ZA 2002005228	A	20030630	ZA 2002-5228	20020628
PRIORITY APPLN. INFO.:			IN 1999-B0972	A 19991228
			IN 1999-B0977	A 19991228
			US 2000-540749	A 20000331
			EP 2000-983422	A 20001222
			NZ 2000-519926	A1 20001222
			WO 2000-GB4982	A 20001222
AB	The invention provides 3 new polymorphic forms of olanzapine, a process for preparing the new polymorphs and pharmaceutical compns. containing the polymorphs. The new polymorphic forms of olanzapine are useful for the treatment of psychotic conditions, mild anxiety and gastrointestinal conditions. Form I olanzapine (10 g) was dissolved in a mixture of 30 mL HOAc and 30 mL water by stirring. Activated charcoal (0.5 g) was			



added and the contents filtered over celite. The clear solution was maintained at 20° and 15% aqueous ammonia solution was added over a period of 30 min to adjust the pH to 8. The contents were filtered and dried to obtain Form III olanzapine (9.6 g), which was characterized by IR and XRD.

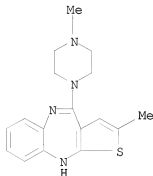
IT 132539-06-1, Olanzapine

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polymorphic forms of olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)



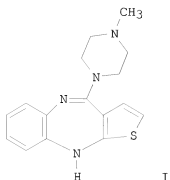
OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD  
(7 CITINGS)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 82 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2001:489405 HCAPLUS  
 DOCUMENT NUMBER: 135:76906  
 TITLE: Preparation and characterization of new  
 polymorphic crystal forms of  
 olanzapine  
 INVENTOR(S): Hamied, Yusuf Khwaja; Kankan, Rajendra Narayanrao;  
 Rao, Dharmaraj Ramachandra  
 PATENT ASSIGNEE(S): Cipla Ltd., India; Wain, Christopher, Paul  
 SOURCE: PCT Int. Appl., 60 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001047933	A1	20010705	WO 2000-GB4982	20001222
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
IN 187439	A1	20020427	IN 1999-B0977	19991228
US 6348458	B1	20020219	US 2000-540749	20000331
CA 2395774	A1	20010705	CA 2000-2395774	20001222
AU 2001020176	A	20010709	AU 2001-20176	20001222
AU 779452	B2	20050127		
EP 1246827	A1	20021009	EP 2000-983422	20001222
EP 1246827	B1	20050413		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
NZ 519926	A	20040227	NZ 2000-519926	20001222
AT 293113	T	20050415	AT 2000-983422	20001222
ZA 2002005228	A	20030630	ZA 2002-5228	20020628
PRIORITY APPLN. INFO.:			IN 1999-B0977	A 19991228
			US 2000-540749	A 20000331
			IN 1999-B0972	A 19991228
			WO 2000-GB4982	A 20001222

GI

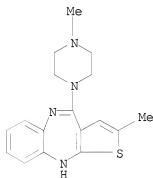


AB Three new polymorphic forms of 2-methyl-4-[4-methyl-1-piperazinyl]-10H-thieno[2,3-b][1,5]benzodiazepine (I; i.e., olanzapine), an antipsychotic (no data) and anxiolytic (no data), are prepared by dissolving the initial I polymorph in aqueous acidic solns. (e.g., AcOH) and precipitating a different I crystal polymorph by neutralization with a base (e.g., aqueous sodium hydroxide). The new polymorphic I forms are characterized via X-ray powder diffraction and FT-IR.

IT 132539-06-1, Olanzapine  
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)  
 (preparation and characterization of new polymorphic crystal forms of olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 83 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:233761 HCAPLUS

DOCUMENT NUMBER: 130:276761

TITLE: Method for treating sexual dysfunction using  
2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5] benzodiazepine

INVENTOR(S): Van Tran, Pierre

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

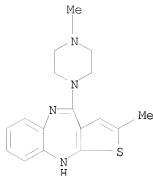
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9916312	A1	19990408	WO 1998-US20152	19980925
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2304472	A1	19990408	CA 1998-2304472	19980925
AU 9895834	A	19990423	AU 1998-95834	19980925
JP 2001517684	T	20011009	JP 2000-513466	19980925
ZA 9808840	A	20000328	ZA 1998-8840	19980928
US 20020040021	A1	20020404	US 1998-162311	19980928
US 6432943	B1	20020813		
EP 911028	A2	19990428	EP 1998-307950	19980930
EP 911028	A3	19990506		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			US 1997-60415P	P 19970930
			WO 1998-US20152	W 19980925
AB	The invention provides a method for treating a sexual dysfunction comprising administering an effective amount of 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5] benzodiazepine. Preparation of the compound of the invention is described, and pharmaceutical compns. are included.			
IT	132539-06-1D, form I			
RL:	BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FMU (Formation, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); USES (Uses)			
	(thenobenzodiazepine derivative for sexual dysfunction treatment, preparation, and compns.)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)			



RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(thienobenzodiazepine deriv. for sexual dysfunction treatment, prepn., and comps.

OS.CITING REF COUNT:	4	THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
REFERENCE COUNT:	1	THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 84 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1998:263237 HCAPLUS  
 DOCUMENT NUMBER: 128:312930  
 ORIGINAL REFERENCE NO.: 128:61929a,61932a  
 TITLE: Olanzapine for treating insomnia  
 INVENTOR(S): Van Tran, Pierre  
 PATENT ASSIGNEE(S): Eli Lilly and Company, USA  
 SOURCE: U.S., 6 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

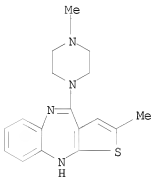
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5744470	A	19980428	US 1997-799052	19970210
PRIORITY APPLN. INFO.:			US 1997-799052	19970210

AB The invention provides a method for treating insomnia comprising administering an effective amount of olanzapine to an elderly patient who has been previously treated with a hypnotic agent. 2-Methyl-10H-thieno[2,3-b][1,5]benzodiazepin-4-amine·HCl was treated with N-methylpiperazine to obtain olanzapine, which was suspended in anhydrous EtOAc while heating and the product was isolated using vacuum filtration. The product was identified as Form II using x-ray powder anal. A tablet was formulated containing 1.18 % olanzapine.

IT 132539-06-1P, Olanzapine  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (olanzapine for treating insomnia)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)  
 REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 85 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:226721 HCAPLUS

DOCUMENT NUMBER: 128:261935

ORIGINAL REFERENCE NO.: 128:51767a,51770a

TITLE: Olanzapine polymorph

crystal form pharmaceutical

INVENTOR(S): Bunnell, Charles Arthur; Hendriksen, Barry Arnold;

Larsen, Samuel Dean

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: U.S., 8 pp., Cont.-in-part of U.S. Ser. No. 409,566, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5736541	A	19980407	US 1996-686989	19960725
EG 23659	A	20070326	EG 1950-2	19960321
CA 2214005	A1	19961003	CA 1996-2214005	19960322
CA 2214005	C	20010703		
WO 9630375	A1	19961003	WO 1996-US3917	19960322
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9652578	A	19961016	AU 1996-52578	19960322
AU 9654279	A	19961016	AU 1996-54279	19960322
AU 706471	B2	19990617		
ZA 9602342	A	19970922	ZA 1996-2342	19960322
ZA 9602344	A	19970922	ZA 1996-2344	19960322
GB 2313835	A	19971210	GB 1997-19819	19960322
GB 2313835	B	19980916		
DE 19681286	T0	19980402	DE 1996-19681286	19960322
CN 1179160	A	19980415	CN 1996-192775	19960322
CN 1065536	C	20010509		
BR 9607790	A	19980707	BR 1996-7790	19960322
JP 11502535	T	19990302	JP 1996-529532	19960322
HU 9802824	A2	19990628	HU 1998-2824	19960322
HU 9802824	A3	20000128		
HU 224989	B1	20060529		
AT 9609021	A	20000115	AT 1996-9021	19960322
AT 406771	B	20000825		
AP 828	A	20000428	AP 1997-1065	19960322
W: KE, LS, MW, SD, SZ, UG				
CH 690579	A5	20001031	CH 1997-2245	19960322
TW 442488	B	20010623	TW 1996-85103500	19960322
EE 3489	B1	20010815	EE 1997-232	19960322
IL 117610	A	20010826	IL 1996-117610	19960322
AT 204280	T	20010915	AT 1996-302000	19960322
ES 2159346	T3	20011001	ES 1996-302000	19960322
PL 183723	B1	20020731	PL 1996-322501	19960322
TW 513432	B	20021211	TW 1996-85103499	19960322

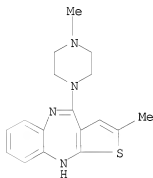
AT 251627	T	20031015	AT 2000-203573	19960322
CZ 292688	B6	20031112	CZ 1997-3000	19960322
RO 118872	B1	20031230	RO 1997-1761	19960322
ES 2208220	T3	20040616	ES 2000-203573	19960322
SK 284143	B6	20041005	SK 1997-1218	19960322
IN 1996CA00514	A	20050304	IN 1996-CA514	19960322
AT 331719	T	20060715	AT 2003-77455	19960322
ES 2266719	T3	20070301	ES 2003-77455	19960322
SE 9703205	A	19970905	SE 1997-3205	19970905
LV 12018	B	19980920	LV 1997-163	19970908
LT 4349	B	19980525	LT 1997-148	19970916
FI 9703750	A	19970922	FI 1997-3750	19970922
NO 9704365	A	19970922	NO 1997-4365	19970922
NO 314663	B1	20030428		
DK 9701089	A	19971112	DK 1997-1089	19970923
HK 1013988	A1	20020705	HK 1998-115175	19981223
IN 1999CA00383	A	20050311	IN 1999-CA383	19990423
PRIORITY APPLN. INFO.:			US 1995-409566	B2 19950324
			US 1995-410474	A 19950324
			IN 1996-CA514	A3 19960322
			WO 1996-US3854	W 19960322
			WO 1996-US3917	W 19960322

AB The invention provides Form II, a pharmaceutically elegant, stable polymorph of olanzapine, useful for treating psychotic conditions, mild anxiety and gastrointestinal conditions.

IT 132539-06-1, Olanzapine  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (form II; olanzapine polymorph crystal  
 form pharmaceutical)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)



OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



L27 ANSWER 86 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:204464 HCAPLUS

DOCUMENT NUMBER: 128:275100

ORIGINAL REFERENCE NO.: 128:54369a,54372a

TITLE: Intermediates and process for preparing olanzapine

INVENTOR(S): Bunnell, Charles Arthur; Larsen, Samuel Dean; Nichols, John Richard; Reutzel, Susan Marie; Stephenson, Gregory Alan

PATENT ASSIGNEE(S): Eli Lilly and Co., USA

SOURCE: Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 831098	A2	19980325	EP 1997-307383	19970922
EP 831098	A3	19980429		
EP 831098	B1	20011121		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
ZA 9708515	A	19990323	ZA 1997-8515	19970902
CA 2265712	A1	19980326	CA 1997-2265712	19970918
CA 2265712	C	20061031		
WO 9812199	A1	19980326	WO 1997-US16499	19970918
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9744841	A	19980414	AU 1997-44841	19970918
AU 719441	B2	20000511		
BR 9712100	A	19990831	BR 1997-12100	19970918
CN 1234802	A	19991110	CN 1997-198137	19970918
CN 1122036	C	20030924		
HU 2000000066	A2	20000628	HU 2000-66	19970918
HU 2000000066	A3	20001128		
HU 226484	B1	20090302		
NZ 334448	A	20000825	NZ 1997-334448	19970918
JP 2001500877	T	20010123	JP 1998-514842	19970918
IL 128962	A	20030112	IL 1997-128962	19970918
PL 194565	B1	20070629	PL 1997-332482	19970918
PL 196069	B1	20071231	PL 1997-381478	19970918
PL 196068	B1	20071231	PL 1997-381479	19970918
CZ 299248	B6	20080528	CZ 1999-990	19970918
IN 187156	A1	20020216	IN 1997-CA1736	19970919
AT 209208	T	20011215	AT 1997-307383	19970922
ES 2166051	T3	20020401	ES 1997-307383	19970922
US 6020487	A	20000201	US 1997-935884	19970923
EG 23861	A	20071118	EG 1997-986	19970923
TW 470746	B	20020101	TW 1997-86113832	19980227
HK 1009807	A1	20020913	HK 1998-110796	19980921
NO 9901382	A	19990322	NO 1999-1382	19990322

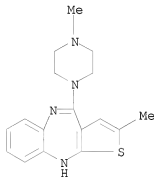
NO 323980 B1 20070730  
 KR 2000048520 A 20000725 KR 1999-702424 19990322  
 PRIORITY APPLN. INFO.: US 1996-26487P P 19960923  
 WO 1997-US16499 W 19970918

AB The present invention provides a process for preparing olanzapine and dihydrate polymorphs. Olanzapine was prepared from a known intermediate and later converted to its dihydrate. The x-ray powder anal. of the compound was carried out.

IT 205485-16-1P  
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (intermediates and process for preparing olanzapine)

RN 205485-16-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
 2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:2) (CA INDEX NAME)



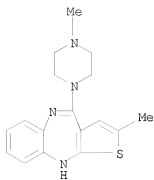
● 2 H<sub>2</sub>O

IT 132539-06-1P, Olanzapine  
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (intermediates and process for preparing olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)

10/591,831



OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS  
RECORD (10 CITINGS)

L27 ANSWER 87 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:204463 HCAPLUS

DOCUMENT NUMBER: 128:261934

ORIGINAL REFERENCE NO.: 128:51767a

TITLE: Crystalline olanzapine dihydrate D for aqueous formulation

INVENTOR(S): Larsen, Samuel Dean; Nichols, John Richard; Reutzel, Susan Marie; Stephenson, Gregory Alan

PATENT ASSIGNEE(S): Eli Lilly and Co., USA

SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 831097	A2	19980325	EP 1997-307379	19970922
EP 831097	A3	19980429		
EP 831097	B1	20020724		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CA 2266444	A1	19980326	CA 1997-2266444	19970918
CA 2266444	C	20070109		
WO 9811893	A1	19980326	WO 1997-US16586	19970918
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9744241	A	19980414	AU 1997-44241	19970918
AU 720366	B2	20000601		
BR 9711541	A	19990824	BR 1997-11541	19970918
CN 1234738	A	19991110	CN 1997-198121	19970918
CN 1146567	C	20040421		
NZ 334346	A	20000526	NZ 1997-334346	19970918
HU 2000000065	A2	20000628	HU 2000-65	19970918
HU 2000000065	A3	20001128		
HU 226167	B1	20080528		
JP 2001500878	T	20010123	JP 1998-514881	19970918
PL 194074	B1	20070430	PL 1997-332541	19970918
CZ 299247	B6	20080528	CZ 1999-989	19970918
IN 1997CA01734	A	20050708	IN 1997-CA1734	19970919
ZA 9708512	A	19990323	ZA 1997-8512	19970922
AT 221074	T	20020815	AT 1997-307379	19970922
ES 2180899	T3	20030216	ES 1997-307379	19970922
US 6251895	B1	20010626	US 1997-935883	19970923
EG 23815	A	20070819	EG 1997-985	19970923
TW 518335	B	20030121	TW 1997-86113833	19980227
HK 1009809	A1	20030509	HK 1998-110803	19980921
NO 9901339	A	19990319	NO 1999-1339	19990319
NO 323979	B1	20070730		
KR 2000048519	A	20000725	KR 1999-702423	19990322
PRIORITY APPLN. INFO.:			US 1996-26486P	P 19960923
			WO 1997-US16586	W 19970918

AB The present invention relates to the crystalline dihydrate D of olanzapine, particularly useful for preparing an aqueous formulation. The stable crystalline dihydrate D olanzapine polymorph (x-ray powder diffraction pattern given) is useful for treating psychotic patients. An oral suspension contained dihydrate D olanzapine 20 mg, Na CMC 50 mg, syrups 1.25 mL, benzoic acid solution 0.1 mL, flavors q.s., colors q.s., and water to 5 mL.

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L27 ANSWER 88 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:204419 HCAPLUS

DOCUMENT NUMBER: 128:261968

ORIGINAL REFERENCE NO.: 128:51771a,51774a

TITLE: Pharmaceutical composition containing combination of atypical antipsychotic and serotonin reuptake inhibitor for treatment of psychoses

INVENTOR(S): Bymaster, Franklin Porter; Perry, Kenneth Wayne; Tollefson, Gary Dennis

PATENT ASSIGNEE(S): Eli Lilly and Co., USA

SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 830864	A1	19980325	EP 1997-307375	19970922
EP 830864	B1	20030129		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
ZA 9707967	A	19990304	ZA 1997-7967	19970904
CA 2264941	A1	19980326	CA 1997-2264941	19970909
CA 2264941	C	20081118		
WO 9811897	A1	19980326	WO 1997-US15874	19970909
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9744112	A	19980414	AU 1997-44112	19970909
AU 719033	B2	20000504		
BR 9711530	A	19990824	BR 1997-11530	19970909
CN 1230886	A	19991006	CN 1997-198113	19970909
CN 1162156	C	20040818		
NZ 334168	A	20000929	NZ 1997-334168	19970909
HU 9903905	A2	20001028	HU 1999-3905	19970909
HU 9903905	A3	20010328		
JP 2001503031	T	20010306	JP 1998-514717	19970909
PL 190374	B1	20051230	PL 1997-332481	19970909
TW 541178	B	20030711	TW 1997-86113280	19970912
EP 1256345	A1	20021113	EP 2002-16238	19970922
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO, AL				
AT 231724	T	20030215	AT 1997-307375	19970922
ES 2191152	T3	20030901	ES 1997-307375	19970922
US 6147072	A	20001114	US 1997-935872	19970923
HK 1009755	A1	20031024	HK 1998-110801	19980921
NO 9901381	A	19990322	NO 1999-1381	19990322
NO 319166	B1	20050627		
KR 2000048518	A	20000725	KR 1999-702422	19990322
PRIORITY APPLN. INFO.:			US 1996-26884P	P 19960923
			WO 1997-US15874	W 19970909
			EP 1997-307375	A3 19970922

AB Pharmaceutical compns. containing combination of atypical antipsychotics and serotonin reuptake inhibitors are useful for the treatment of psychoses. Form II olanzapine (I) polymorph was prepared by heating I at 76° for 30 min in Et acetate and crystallization Hard gelatin capsules contained I 25, fluoxetine hydrochloride 20, starch 150, and magnesium stearate 10 mg.

OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)  
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

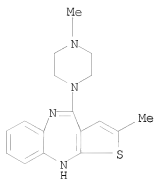
L27 ANSWER 89 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1997:650271 HCAPLUS  
 DOCUMENT NUMBER: 127:298752  
 ORIGINAL REFERENCE NO.: 127:58294h,58295a  
 TITLE: Olanzapine for treatment of pain  
 INVENTOR(S): Helton, David R.; Kallman, Mary J.; Shannon, Harlan E.; Womer, Daniel E.  
 PATENT ASSIGNEE(S): Eli Lilly and Company, USA  
 SOURCE: PCT Int. Appl., 26 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9735583	A1	1997/1002	WO 1997-US4626	1997/0324
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, YU				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2248873	A1	1997/1002	CA 1997-2248873	1997/0324
AU 9723408	A	1997/1017	AU 1997-23408	1997/0324
AU 721338	B2	20000629		
EP 910381	A1	19990428	EP 1997-916159	1997/0324
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CN 1219878	A	19990616	CN 1997-194952	1997/0324
BR 9708246	A	19990727	BR 1997-8246	1997/0324
HU 9902723	A2	20000228	HU 1999-2723	1997/0324
HU 9902723	A3	20000428		
HU 9903183	A2	20000228	HU 1999-3183	1997/0324
HU 9903183	A3	20011228		
US 6258807	B1	20010710	US 1997-823460	1997/0324
JP 2001517202	T	20011002	JP 1997-534509	1997/0324
NO 9804446	A	19981125	NO 1998-4446	19980924
KR 2000004964	A	20000125	KR 1998-707568	19980924
PRIORITY APPLN. INFO.:			US 1996-14131P	P 19960325
			US 1996-14133P	P 19960325
			US 1996-14153P	P 19960325
			WO 1997-US4626	W 19970324
AB	The present invention provides a method for treating pain comprising administering an analgesic dosage of olanzapine or its polymorph. Olanzapine was prepared by reaction of 2-methyl-4-amino-10H-thieno[2,3-b][1,5]-benzodiazepine with N-methylpiperazine in DMSO. Olanzapine tablets were prepared by using a coating solution of 10% HPMC.			
IT	132539-06-1P, Olanzapine			
	RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)			
	(analgesic compns. containing olanzapine)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-			



10/591,831

(CA INDEX NAME)



REFERENCE COUNT:

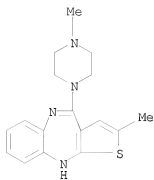
1

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 90 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1997:650270 HCAPLUS  
 DOCUMENT NUMBER: 127:298751  
 ORIGINAL REFERENCE NO.: 127:58291a,58294a  
 TITLE: Method for treating migraine pain  
 INVENTOR(S): Shannon, Harlan E.; Womer, Daniel E.  
 PATENT ASSIGNEE(S): Eli Lilly and Company, USA  
 SOURCE: PCT Int. Appl., 28 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9735582	A1	1997/1002	WO 1997-US4471	19970324
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, YU				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2250186	A1	1997/1002	CA 1997-2250186	19970324
AU 9725845	A	1997/1017	AU 1997-25845	19970324
AU 721290	B2	20000629		
CN 1219876	A	19990616	CN 1997-194950	19970324
CN 1106196	C	20030423		
BR 9708145	A	19990727	BR 1997-8145	19970324
US 5929070	A	19990727	US 1997-823457	19970324
EP 932407	A1	19990804	EP 1997-917556	19970324
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO				
NZ 332037	A	20010126	NZ 1997-332037	19970324
JP 2001508759	T	20010703	JP 1997-534491	19970324
IL 126063	A	20020421	IL 1997-126063	19970324
NO 9804432	A	19981124	NO 1998-4432	19980923
KR 2000004966	A	20000125	KR 1998-707570	19980924
PRIORITY APPLN. INFO.:			US 1996-14127P	P 19960325
			WO 1997-US4471	W 19970324
AB	The present invention provides a method for treating migraine pain comprising administering an analgesic dosage of olanzapine. Olanzapine was prepared and a polymorphic form prepared and characterized. Tablet formulations were given.			
IT	132539-06-1P, Olanzapine RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (olanzapine compns. for treatment of migraine pain)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)			

10/591,831



REFERENCE COUNT:

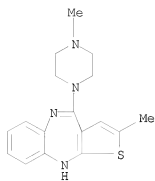
2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 91 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1997:632496 HCAPLUS  
 DOCUMENT NUMBER: 127:268052  
 ORIGINAL REFERENCE NO.: 127:52223a  
 TITLE: Olanzapine for the treatment of insomnia  
 INVENTOR(S): Van Tran, Pierre  
 PATENT ASSIGNEE(S): Eli Lilly and Co., USA  
 SOURCE: Eur. Pat. Appl., 12 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

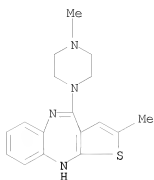
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 795330	A1	19970917	EP 1997-301534	19970307
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
ZA 9701899	A	19980907	ZA 1997-1899	19970305
CA 2248758	A1	19970918	CA 1997-2248758	19970307
WO 9733587	A1	19970918	WO 1997-US3592	19970307
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, YU				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9721989	A	19971001	AU 1997-21989	19970307
AU 724245	B2	20000914		
CN 1212627	A	19990331	CN 1997-192796	19970307
BR 9708181	A	19990727	BR 1997-8181	19970307
JP 2000506528	T	20000530	JP 1997-532707	19970307
NZ 331846	A	20000728	NZ 1997-331846	19970307
NO 9804190	A	19980911	NO 1998-4190	19980911
PRIORITY APPLN. INFO.:			US 1996-13126P	P 19960311
			GB 1996-6731	A 19960329
			WO 1997-US3592	W 19970307
AB	The invention discloses the use of olanzapine for treating insomnia. The preparation and polymorphic form of olanzapine were given and tablets were prepared			
IT	132539-06-1P, Olanzapine			
	RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)			
	(olanzapine for the treatment of insomnia)			
RN	132539-06-1 HCAPLUS			
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)			

10/591,831



L27 ANSWER 92 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1997:623041 HCAPLUS  
 DOCUMENT NUMBER: 127:244231  
 ORIGINAL REFERENCE NO.: 127:47599a,47602a  
 TITLE: Method for treating substance abuse  
 INVENTOR(S): Beasley, Charles M., Jr.; Rasmussen, Kurt; Tollefson, Gary D.  
 PATENT ASSIGNEE(S): Eli Lilly and Company, USA  
 SOURCE: PCT Int. Appl., 31 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9733586	A1	19970918	WO 1997-US3404	19970310
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, YU				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2248738	A1	19970918	CA 1997-2248738	19970310
AU 9720672	A	19971001	AU 1997-20672	19970310
AU 725940	B2	20001026		
CN 1213308	A	19990407	CN 1997-193069	19970310
BR 9708037	A	19990727	BR 1997-8037	19970310
HU 9903502	A2	20000228	HU 1999-3502	19970310
HU 9903502	A3	20000428		
EP 1007050	A1	20000614	EP 1997-908871	19970310
EP 1007050	B1	20050518		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI				
NZ 331845	A	20000929	NZ 1997-331845	19970310
JP 2000517287	T	20001226	JP 1997-522340	19970310
AT 295731	T	20050615	AT 1997-908871	19970310
US 6159963	A	20001212	US 1997-952845	19971125
NO 9804196	A	19981103	NO 1998-4196	19980911
PRIORITY APPLN. INFO.:			US 1996-13160P	P 19960311
			US 1996-13161P	P 19960311
			GB 1996-6615	A 19960329
			GB 1996-6617	A 19960329
			WO 1997-US3404	W 19970310
AB The invention provides a method for treating substance abuse comprising administering an effective amount of olanzapine or pharmaceutically acceptable salt thereof to a patient in need thereof.				
IT 132539-06-1, Olanzapine				
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)				
(olanzapine for treating substance abuse)				
RN 132539-06-1 HCAPLUS				
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)				



OS.CITING REF COUNT:	5	THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
REFERENCE COUNT:	2	THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 93 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:623040 HCAPLUS

DOCUMENT NUMBER: 127:268044

ORIGINAL REFERENCE NO.: 127:52219a,52222a

TITLE: Olanzapine for treating autism and mental retardation

INVENTOR(S): Beasley, Charles M., Jr.; Tollefson, Gary D.

PATENT ASSIGNEE(S): Eli Lilly and Company, USA; Beasley, Charles M. Jr.;

Tollefson, Gary D.

SOURCE: PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9733585	A1	19970918	WO 1996-US19576	19961204
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2248741	A1	19970918	CA 1996-2248741	19961204
AU 9711501	A	19971001	AU 1997-11501	19961204
AU 709181	B2	19990826		
CN 1213970	A	19990414	CN 1996-180207	19961204
BR 9612552	A	19990720	BR 1996-12552	19961204
EP 946179	A1	19991006	EP 1996-942934	19961204
EP 946179	B1	20030917		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI				
HU 9903688	A2	20000328	HU 1999-3688	19961204
HU 9903688	A3	20011228		
JP 20000506860	T	20000606	JP 1997-532571	19961204
NZ 324615	A	20000825	NZ 1996-324615	19961204
AT 249832	T	20031015	AT 1996-942934	19961204
ES 2206614	T3	20040516	ES 1996-942934	19961204
NO 9804197	A	19981103	NO 1998-4197	19980911
PRIORITY APPLN. INFO.:			US 1996-13162P	P 19960311
			WO 1996-US19576	W 19961204

AB The invention provides a method for treating autistic disorder and/or mental retardation comprising administering an effective amount of olanzapine (I) to a patient in need thereof. I is preferably in Form II polymorph and orally administered. I was suspended in anhydrous EtOAc, heated to 76°, cooled to 25°, and isolated using vacuum filtration. The product was identified as Form II using x-ray powder anal. I was formulated into tablets.

IT 132539-06-1P, Olanzapine

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

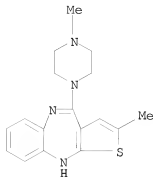
(olanzapine for treating autism and mental retardation)



10/591,831

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)



OS.CITING REF COUNT:	4	THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
REFERENCE COUNT:	2	THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

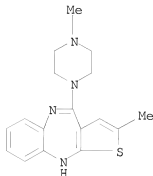
L27 ANSWER 94 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1997:623039 HCAPLUS  
 DOCUMENT NUMBER: 127:268043  
 ORIGINAL REFERENCE NO.: 127:52219a,52222a  
 TITLE: Olanzapine for treating excessive aggression  
 INVENTOR(S): Beasley, Charles M., Jr.; Tran, Pierre V.  
 PATENT ASSIGNEE(S): Eli Lilly and Company, USA; Beasley, Charles M., Jr.;  
 Tran, Pierre V.  
 SOURCE: PCT Int. Appl., 17 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9733584	A1	19970918	WO 1996-US19573	19961204
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2248753	A1	19970918	CA 1996-2248753	19961204
CA 2248753	C	20081118		
AU 9712846	A	19971001	AU 1997-12846	19961204
AU 719517	B2	20000511		
EP 900085	A1	19990310	EP 1996-943659	19961204
EP 900085	B1	20051012		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI				
CN 1213969	A	19990414	CN 1996-180206	19961204
CN 1124847	C	20031022		
BR 9612549	A	19990720	BR 1996-12549	19961204
HU 9903685	A2	20000328	HU 1999-3685	19961204
HU 9903685	A3	20011228		
JP 2000506858	T	20000606	JP 1997-532569	19961204
NZ 325035	A	20010629	NZ 1996-325035	19961204
RO 117347	B1	20020228	RO 1998-1386	19961204
IL 126157	A	20020912	IL 1996-126157	19961204
PL 186975	B1	20040430	PL 1996-328949	19961204
AT 306269	T	20051015	AT 1996-943659	19961204
ES 2249789	T3	20060401	ES 1996-943659	19961204
CZ 296579	B6	20060412	CZ 1998-2905	19961204
NO 9804198	A	19981102	NO 1998-4198	19980911
NO 323579	B1	20070611		
PRIORITY APPLN. INFO.:			US 1996-13127P	P 19960311
			WO 1996-US19573	W 19961204
AB	The invention provides a method for treating extreme aggression comprising administering an effective amount of olanzapine to a patient in need thereof.			
IT	132539-06-1, Olanzapine			
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC			

(Process); USES (Uses)  
 (crystal polymorph II; olanzapine for  
 treating excessive aggression)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
 (CA INDEX NAME)



OS.CITING REF COUNT:	5	THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
REFERENCE COUNT:	2	THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 95 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:403057 HCAPLUS

DOCUMENT NUMBER: 127:13469

ORIGINAL REFERENCE NO.: 127:2623a,2626a

TITLE: Olanzapine for treatment of  
obsessive-compulsive disorder

INVENTOR(S): Beasley, Charles Merritt, Jr.; Tollefson, Gary Dennis

PATENT ASSIGNEE(S): Eli Lilly and Co., USA

SOURCE: Brit. UK Pat. Appl., 18 pp.

CODEN: BAXXDU

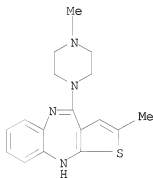
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	GB 2305859	A	1997/0423	GB 1996-6614	19960329
PRIORITY APPLN. INFO.:				GB 1996-6614	19960329
AB	Olanzapine is useful in the treatment of obsessive-compulsive disorder. The olanzapine may be the form II olanzapine polymorph. Preparation of the polymorph is described. Preparation of a tablet formulation is also included.				
IT	132539-06-1, Olanzapine RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses) (olanzapine for treatment of obsessive-compulsive disorder)				
RN	132539-06-1 HCAPLUS				
CN	10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)				

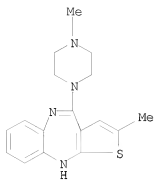


IT 132539-06-1D, Olanzapine, form II polymorph  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(olanzapine polymorph for treatment of  
obsessive-compulsive disorder)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)

10/591,831



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L27 ANSWER 96 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:644040 HCAPLUS

DOCUMENT NUMBER: 125:275918

ORIGINAL REFERENCE NO.: 125:51613a,51616a

TITLE: Preparation of crystalline

olanzapine

INVENTOR(S): Bunnell, Charles Arthur; Hendriksen, Barry Arnold;

Larsen, Samuel Dean

PATENT ASSIGNEE(S): Eli Lilly and Co., USA; Lilly Industries Ltd.

SOURCE: Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 733635	A1	19960925	EP 1996-302000	19960322
EP 733635	B1	20010816		
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
EG 23659	A	20070326	EG 1950-2	19960321
CA 2214005	A1	19961003	CA 1996-2214005	19960322
CA 2214005	C	20010703		
WO 9630375	A1	19961003	WO 1996-US3917	19960322
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9652578	A	19961016	AU 1996-52578	19960322
AU 9654279	A	19961016	AU 1996-54279	19960322
AU 706471	B2	19990617		
ZA 9602342	A	19970922	ZA 1996-2342	19960322
ZA 9602344	A	19970922	ZA 1996-2344	19960322
GB 2313835	A	19971210	GB 1997-19819	19960322
GB 2313835	B	19980916		
DE 19681286	T0	19980402	DE 1996-19681286	19960322
CN 1179160	A	19980415	CN 1996-192775	19960322
CN 1065536	C	20010509		
BR 9607790	A	19980707	BR 1996-7790	19960322
JP 11502535	T	19990302	JP 1996-529532	19960322
HU 9802824	A2	19990628	HU 1998-2824	19960322
HU 9802824	A3	20000128		
HU 224989	B1	20060529		
AT 9609021	A	20000115	AT 1996-9021	19960322
AT 406771	B	20000825		
AP 828	A	20000428	AP 1997-1065	19960322
W: KE, LS, MW, SD, SZ, UG				
CH 690579	A5	20001031	CH 1997-2245	19960322
EP 1095941	A1	20010502	EP 2000-203573	19960322
EP 1095941	B1	20031008		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI				
TW 442488	B	20010623	TW 1996-85103500	19960322
EE 3489	B1	20010815	EE 1997-232	19960322

IL 117610	A	20010826	IL 1996-117610	19960322
AT 204280	T	20010915	AT 1996-302000	19960322
ES 2159346	T3	20011001	ES 1996-302000	19960322
PL 183723	B1	20020731	PL 1996-322501	19960322
TW 513432	B	20021211	TW 1996-85103499	19960322
AT 251627	T	20031015	AT 2000-203573	19960322
CZ 292688	B6	20031112	CZ 1997-3000	19960322
RO 118872	B1	20031230	RO 1997-1761	19960322
ES 2208220	T3	20040616	ES 2000-203573	19960322
EP 1445259	A1	20040811	EP 2003-77455	19960322
EP 1445259	B1	20060628		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,  
SI, LT, LV, FI, AL

SK 284143	B6	20041005	SK 1997-1218	19960322
IN 1996CA00514	A	20050304	IN 1996-CA514	19960322
AT 331719	T	20060715	AT 2003-77455	19960322
ES 2266719	T3	20070301	ES 2003-77455	19960322
SE 9703205	A	19970905	SE 1997-3205	19970905
LV 12018	B	19980920	LV 1997-163	19970908
LT 4349	B	19980525	LT 1997-148	19970916
FI 9703750	A	19970922	FI 1997-3750	19970922
NO 9704365	A	19970922	NO 1997-4365	19970922
NO 314663	B1	20030428		
DK 9701089	A	19971112	DK 1997-1089	19970923
HK 1013988	A1	20020705	HK 1998-115175	19981223
IN 1999CA00383	A	20050311	IN 1999-CA383	19990423

## PRIORITY APPLN. INFO.:

US 1995-409566	A	19950324
US 1995-410474	A	19950324
EP 1996-302000	A3	19960322
EP 2000-203573	A3	19960322
IN 1996-CA514	A3	19960322
WO 1996-US3854	W	19960322
WO 1996-US3917	W	19960322

AB The invention provides a pharmaceutically elegant stable polymorph  
of olanzapine by precipitation from EtOAc.

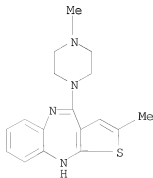
IT 132539-06-1P, Olanzapine

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP  
(Preparation)

(preparation of crystalline olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-  
(CA INDEX NAME)



10/591,831

OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS  
RECORD (13 CITINGS)